Training Center
of Central Texas

COURSE CATALOG

"Your Career Starts Here" ®

Effective Date: APRIL 16, 2019
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THE TRAINING CENTER FOR HEALTHCARE CAREERS, LLC
455 E Central Texas Expressway, suite 106, Harker Heights, TX 76548

Contents

MISSION, HISTORY, INCLUDING ANY/ALL ACCREDITATIONS/APPROVALS

Mission

To provide the best education that will produce the highest quality professionals in the medical profession. To train and inspire students in the healthcare discipline, enabling them to obtain gainful and marketable employment in their respective fields, utilizing 21st-century healthcare skills. Skills and knowledge gained will empower students and lead them to their future success in rewarding and lucrative healthcare careers.

To provide high-quality education, train and support our students to assure marketable employment and remain competitive in their respective fields. In pursuit of the Training Center's mission, the school adheres to provide educational opportunities to all adults regardless of age, gender, socio-economic status, ethnicity, race, religion, or disability.

History

The Training Center of Central Texas, LLC (TTCCT) was established in 2012 by Merlinda B. Rhodes. Her daughter Jamecca B. Murphy is a certified instructor for the American Heart Association (AHA) courses. With that certification under her belt, TTCCT became a *Training Site* for AHA and started offering in October 2012 AHA courses such as Basic Life Support (BLS) and First Aid, CPR AED. The community's training needs urged us to expand and offer courses at the state level.

On December 31, 2012, the school received approval from the Texas Workforce Commission Career Schools and Colleges (known as #S4245). On January 15, 2013, the school received support from the National Healthcareer Association (NHA) as a *Testing Site* for the national competency examination. Today, the school can proctor the national competency examination for Clinical Medical Assistant (CCMA), Electrocardiogram Technician (CET), Electronic Health Records Specialist (CEHRS), and Phlebotomy Technician (CPT) online and hardcopy.

The school started five courses: Clinical Medical Assistant, Dental Assistant, Electrocardiogram (EKG) Technician, Pharmacy Technician, and Phlebotomy Technician. In April 2013, TTCCT expanded and began offering the Electronic Health Record Specialist course. Today we are continually aware of the communities' needs, the labor market, and numerous other factors that enable us to provide new courses increasing in demand.

As a prospective student, you are encouraged to review this catalog and tour the school before signing an enrollment agreement.

Educational Philosophy

The Training Center of Central Texas, LLC (TTCCT) educational philosophy is based upon preparing students for immediate entry into the workforce. The programs offered at TTCCT train students in the professional behaviors and technical skills necessary for success in today's competitive workplace.

This philosophy flows from the School's Mission Statement. To implement its educational philosophy, the school has identified the following educational objectives:

- Stimulate a career and success-oriented outlook in our students
- Communicate the latest technical competencies demanded by employers
- Train students in professional behaviors that will enable lifelong career development
- Develop students' participation and enhance their leadership capabilities
- Provide students with services and the support needed to achieve their educational and career goals

Objectives

The Training Center of Central Texas, LLC prepares students to achieve their future goals in their chosen professional career field in accordance with the following objectives:

To provide excellent academic and professional preparation of students for a career in their chosen field of specialization

- To assist students in the development and maintenance of high standards of achievement
- To provide the necessary encouragement for critical thinking that is essential in the professional world

To assist students in achieving these objectives, TTCCT has established a professional environment consisting of

- A faculty of highly educated & experienced professionals possessing extensive knowledge, skills, experience, and concern for student achievement and success.
- Hands-on training on modern equipment used in a professional workplace simulated environment.
- A curriculum devoted to career-related subjects that combines theoretical education with hands-on training, thereby enabling students to acquire knowledge and skills in various career programs that are in strong demand by employers.
- Staff play an active role in assisting graduates in obtaining employment in their respective fields.
- Attendance, behavioral, and dress code policies designed to not only emulate but exude a level of professionalism and attitude which will prepare students for success in the job market

Vision Statement

Training Center of Central Texas, LLC (TTCCT) vision is to instruct students to competency levels for employment and career advancement in today's competitive healthcare job market. Individuals choose a study program that will enable them to develop academic skills and technical competence necessary for job acquisition and retention. We strive to provide the healthcare certification training needs for the residents of Bell County, including the citizens in the surrounding communities of – Harker Heights, Killeen, Ft Hood, Copperas Cove, Nolanville, Gatesville, Belton, Lampasas, and Temple areas for the benefit of the citizens as well as the State of Texas as a whole. These healthcare certifications training will boost and promote individuals' careers and benefit the community they may serve.

In addition, we excel by – increasing awareness of the community's professional healthcare needs and how to best address those needs by way of a comprehensive training regimen, input from community members and experts, hiring the most qualified staff, and committing to implementing the best practices in the vocational training healthcare field. We will distinguish ourselves from other providers in the area

by setting high standards for our administrators, faculty, and students; this will be achieved by developing sound policies and practices and standing firm on the principles they represent.

DESCRIPTION OF AVAILABLE SPACE, FACILITIES, AND EQUIPMENT

The business office is located at 455 East Central Texas Expressway, Suite 106 in Harker Heights, Texas, and classes are held in a formal classroom setting with space available for up to sixteen (16) students, per teacher, per class session. Classrooms are equipped with appropriate seating with built-in computer systems at each desk and practice (lab) areas for training and simulation. Equipment, training materials, and training supplies for simulation purposes are located onsite. The break room and two restrooms are also located onsite.

The school's clinical/externship training is conducted either at the school campus located at 455 East Central Texas Expressway, Suite 106 in Harker Heights, Texas, or at various partner sites to include areas of dental, medical and physician offices, hospitals, residential care facilities and pharmaceutical retail store in Copperas Cove, Belton, Killeen, Temple, and Gatesville area that has entered into agreements with the Training Center for Healthcare Careers, LLC for clinical or externship opportunities. Approved clinical sites are individually issued insurance Certificates of Liability to cover students' damages, if any while performing or completing the required externship hours. Any incident occurring off-site must be reported to the main office in a timely manner.

LISTING OF OWNERS

1) Reginald Hodges
2) Bayan "Bianca" Kanaanian

A LISTING OF KEY STAFF AND FACULTY

Reginald Hodges: Owner, Governing Person, Chief Executive Officer/President, Instructor

a) Degree Held: Master's in electrical engineering
b) Specialized Training: Electrical Engineering
c) Certification: None
d) Area(s) of Instruction: Solar Energy Technician

Bayan "Bianca" Kanaanian: Owner, Governing Person, Chief of Marketing Officer

a) Degree Held: Petroleum Engineering Student
b) Specialized Training: Marketing
c) Certification: None
d) Area(s) of Instruction: None

Brian Sunshine: School Director

a) Degree Held: Master of Business Administration
b) Specialized Training: None
c) Area(s) of Instruction: None

Christopher Lamei: School Assistant Director

d) Degree Held: BS and MS in Petroleum Engineering
e) Specialized Training: Computer Science
f) Certification: None

Mayleen A. Isla: Lead Instructor

a) Degree Held: Bachelor of Science in Nursing/Lead Instructor
b) Specialized Training: Bachelor of Science in Nursing and Certified AHA Instructor
c) Area(s) of Instruction: Clinical Medical Assisting, Medical Billing Coding, AHA BLS and First Aid/CPR/AED

Dallas Shields: Instructor

a) Degree Held: Licensed Vocational Nurse (LVN)
b) Specialized Training: National Registered Emergency Technician
c) Area(s) of Instruction: Medical Billing and Coding and Clinical Medical Assisting

Marshall Edwards: Instructor

a) Degree Held: None
b) Area(s) of Instruction: Solar Energy Technician

Patrick Callaghan: Instructor

a) Degree Held: Licensed Master Electrician
b) Area(s) of Instruction: Construction Electrician

John Guillot: Instructor

a) Degree Held: Licensed Master Electrician
b) Area(s) of Instruction: Construction Electrician

Rese Shively: Instructor

a) Degree Held: Licensed Journeyman Electrician
b) Area(s) of Instruction: Construction Electrician

Abigail Traverzo Achoro: Instructor

a) Degree Held: Doctorate in Medicine
b) Specialized Training: Healthcare Administration and Leadership
c) Area(s) of Instruction: Clinical Medical Assisting

Sinisa Mandic: Instructor

a) Degree Held: Licensed Journeyman Electrician
b) Area(s) of Instruction: Substation Technology

LIST OF EACH PROGRAM'S FEES, TUITION, AND/OR SPECIAL CHARGES

Registration Fees

The Registration Fee, Drug Test, and Background check are maintained for one year. If a student elects to take multiple classes, there is a $100 administrative fee for any additional class within one year from the first registration. Students must pay the Registration, Background Check, and Drug Test fees upon registration.

Registration Document Requirements

Students receiving any Financial Assistance must present documents of eligibility at the time of registration. Any proof of education or foreign language documents must be translated into English, notarized, and approved by the school.

Tuition Payment

Payment may be made with cash, credit card, money order, or cashier's check made payable to Training Center of Central Texas, LLC. Tuition payments should be made in person at the Front Desk Office during regular office hours or mailed before the due date. **THE SCHOOL DOES NOT ACCEPT BUSINESS/PERSONAL CHECKS.** Payment plans are available.

Past Due Accounts:

i. Students who fail to make prompt payments, issue, or fail to make a good-faith effort to keep their account current and in good standing may be subject to late fees and school disciplinary action. Unpaid accounts are subject to be sent to a collection agency. Once the account has been sent, the student may accrue a collection fee up to 40 percent.
ii. Students dismissed for non-payment of tuition will not be re-admitted until all delinquent tuition payments have been paid in full. TTCCT provides each student with an official Certificate of Course Completion of the program; however, TTCCT reserves the right to withhold the Certificate of Course Completion and deny additional requests for official or unofficial transcripts until the account is brought current.
iii. Students not on good standings with TTCCT:
    1) May not receive their Certificate of Completion.
    2) May not be eligible to participate in the required externships hours.
    3) May not be eligible to take the national or state examination.

Fee Schedules

Clinical Medical Assistant

a) Tuition Fee $5,900.00

b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Lab Fee $ 180.00
f) Basic Life Support (BLS) $ 65.00
g) Uniform (Navy Blue Scrub) (Cost) $ 40.00
h) Book(s) (Cost) $ 121.00 (Student's responsibility)

Comprehensive Medical Assisting
Fifth Edition, Judy Kronenberger, and Julie Ledbetter
Publisher: Jones & Bartlett Learning
ISBN: 9781284226911

i) National Health career Association (NHA) Examination (proctored by (TTCCT) $ 155.00 (Student's responsibility)
j) Total Charge $ 6,670.00

Comprehensive Clinical Medical Assisting Program

a) Tuition Fee $15,500.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 45.00
e) Lab Fee $ 350.00
f) Basic Life Support (BLS) $ 65.00
g) Uniform (Navy Blue Scrub) (Cost) $ 63.00
h) Book(s) (Cost) $ 1,284.00 (Student's responsibility)

1) Medical Terminology, Quick & Easy, 9th Edition
   Publisher: Elsevier
   ISBN: 9780323595995
2) The Medical Administrative Assistant Books
   i. Kinn's Administrative Medical Assistant, (bundle) 14th Edition
      ISBN: 9780323758369
   ii. SimChart for the Medical Office: Learning the Medical Office Workflow
      ISBN: 9780323756631
   iii. Electronic Health Record for the Physician's office 3rd Edition
      Publisher: Elsevier
      ISBN: 9780323642651
3) Introduction to Clinical Medical Assisting Books
   i. Comprehensive Medical Assisting (Bundle), 5th Edition
      Publisher: Jones and Bartlett Learning
      ISBN: 9781284226911
4) The Clinical Medical Laboratory Assisting

i. Electrocardiography for Healthcare Professionals 5th Edition, by Kathryn Booth, Thomas E. O'Brien
Publisher: McGraw Hill
ISBN: 978126026650

ii. Phlebotomy Essentials 7th Edition
Publisher: Jones and Bartlett Learning
ISBN: 9781284224450

i) National Certifications – Paid to NHA (proctored by TTCCT)
   1) Certified Medical Administrative Assistant (CMAA) $125.00 (Student's responsibility)
   2) Certified EKG Technician (CET) $ 125.00 (Student's responsibility)
   3) Certified Phlebotomy Technician (CPT) $ 125.00 (Student's responsibility)
   4) Certified Clinical Medical Assistant (CCMA) $ 160.00 (Student's responsibility)

j) Total Charge $ 16,133.00

Electronic Health Record Specialist (EHRS) Program

a) Tuition Fee $527.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 40.00
g) Book(s) (Cost) $ 66.00 (Student's responsibility)
   Electronic Health Record for the Physician's Office 3rd Edition, by Julie Pepper
   Publisher: Elsevier
   ISBN: 9780323642651
h) National Healthcare Association (NHA)
   (Examination proctored by TTCCT) $ 117.00 (Student's responsibility)
i) Total Charge $ 950.00

Medical Administrative Assistant

a) Tuition Fee $4,000.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 40.00
g) Book(s) (Cost) $ 493.00 (Student's responsibility)
   1) Medical Terminology Quick & Easy, 9th Edition by Peggy C. Leonard
      Publisher: Jones & Bartlett Learning
      ISBN: 9780323595995

2) The Medical Administrative Assistant Books

   i. Kinn's Administrative Medical Assistant *(Bundle)*14th Ed.,
   ISBN: 9780323758369
   ii. SimChart for the Medical Office: Learning the Medical Office Workflow (Updated Ed.)
   ISBN: 9780323756631
   iii. Electronic Health Record for the Physician's Office, 3rd Edition, by Julie Pepper
   Publisher: Elsevier
   ISBN: 9780323642651

h) National Healthcare Association (NHA)
(Examination proctored by TTCCT) $ 117.00 (Student's responsibility)

i) Total Charge $ 4,850.00

Medical Billing and Coding Specialist Program

a) Tuition Fee $5,500.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 40.00
g) Book(s) (Cost) $ 703.00 (Student's responsibility)

1) Medical Terminology Quick & Easy, 9th Ed by Peggy C. Leonard
Publisher: Jones & Bartlett Learning
ISBN: 9780323595995
2) The Human Body in Health and Disease Text and Study Guide by Kerry L. Hull and Barbara Janson Cohen
ISBN 9781469896700
Publisher: Lippincott Williams & Wilkins
3) Package of Medical Billing and Coding Package Books by Carol J. Buck
Publisher: Elsevier Health Science
ISBN: 9780323324533
   i. *Step-By-Step Text and Workbook*
   ii. *2018 CPT*
   iii. *2018, ICD-9-CM*
   iv. *2018 HCPCS Level II.*
4) Coding and Reimbursement Textbook 4th Edition, by Wanda L. Adams
Publisher: Elsevier
ISBN: 3780323084345
5) Electronic Health Record for the Physician's Office 3rd Edition, by Julie Pepper
Publisher: Elsevier

ISBN: 9780323642651

h) National Healthcare Association (NHA)
(Examination proctored by TTCCT) $ 117.00 (Student's responsibility)

i) Total Charge $ 6,560.00

Nursing Assistant

a) Tuition Fee $950.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Lab Fee $ 100.00
f) Basic Life Support (BLS) $ 65.00
g) Uniform (Navy Blue Scrub) (Cost) $ 40.00
h) Book(s) (Cost) $130.00 (Student's responsibility)
"Mosby's ESSENTIALS for Nursing Assistants, Fifth Edition, By Sheila A. Sorrentino, Ph.D., RN Publisher: Elsevier
ISBN: 978-0-323-11317-5 & ISBN: 978-0-323-113212
i) The State Examination Fees through Texas Department of Aging and Disability Services: Full Evaluation $ 95.00 (Student's responsibility)
(Skills and Written), students may register at:
https://www.nursinglicensure.org/cna/texas-nursing-assistant/#context/api/listings/prefilter
j) Total Charge $ 1,515.00

Orthodontic Assisting

a) Tuition Fee $3,500.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 40.00
g) Book(s) (Cost) $ 120.00 (Student's responsibility)
1) Orthodontic Assisting Technique and Theory, 2nd Edition, by D. Douglas Depew, DMD, MS, Publisher: Academy of Orthodontic Assisting, LLC
h) Certified Orthodontic Assistant (COA) Examination, Fees (includes OA and ICE exams) (Go to www.danb.org for further details) $ 425.00 (Student's responsibility)
i) Total Charge $ 4,205.00

Patient Care Technician/Assistant Program (PCT/A)

a) Tuition Fee $4,600.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 45.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 63.00
g) Books (Estimated Cost for a Package of Four) $250-$450 (Student's responsibility)
    1) Medical Terminology Quick and Easy, 9th Ed by Peggy C. Leonard
    Publisher: Elsevier
    ISBN: 9780323595995
    2) Package of three (3) books
    Publisher: McGill Education
        i. Textbook: Theory & Clinical
        ISBN: 978-1-4951-0799-3
        ii. Theory & Practical Approach EKG Textbook 3rd Edition EKG
        ISBN: 978-1-4951-0796-2
        iii. Theory & Clinical Approach Phlebotomy 3rd Edition
        ISBN: 978-1-4951-0793-1
h) National Health Career Association Examination (proctored by TTCCT)
    1) Certified Patient Care Technician/A (CPCT/A) $160.00 (Student's responsibility)
    2) Certified EKG Technician (CET) $125.00 (Student's responsibility)
    3) Certified Phlebotomy Technician (CPT) $125.00 (Student's responsibility)
i) Total Charge $ 4,883.00

Pharmacy Technician

a) Tuition Fee $3,157.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 25.00
e) Lab Fee $ 300.00
f) Basic Life Support (BLS) $ 65.00
g) Uniform (Navy Blue Scrub) (Cost) $ 40.00
h) Book(s) (Cost) $233.00 (Student's responsibility)
    1) *Mosby's Pharmacy Technician* Principles & Practice, 4th Edition Teresa Hopper
    Package of Text and Workbook Publisher: Elsevier
    ISBN-9780323378109
i) National/State Examination Fees:
    1) L1-Fingerprints $50.00 (Student's responsibility)
    2) National Certification Examination $139.00 (Student's responsibility)

3) State Board Trainee Registration (www.tsbp.state.tx.us/Pharmacytech.htm)
$54.00 (Student's responsibility)

j) Total Charge $ 4,173.00

Solar Energy Technician

a) Tuition Fee $5,998.99
b) Registration Fee $ 100.00
c) Lab Fee $ 150.00
d) First Aid CPR/AED $ 75.00
e) Book(s) (Cost) $240.00 (Student's responsibility)
1) Photovoltaic Systems (Third Edition)
by James P. Dunlop
ISBN-10: 1935941054
ISBN-13: 978-1935941057
2) Construction Management JumpStart: The Best First Step Toward a Career in Construction Management / Edition 2 by Barbara Jackson
ISBN-10: 0470609990
ISBN-13: 978-0470609996
3) 2020 National Electrical Code book, NFPA 70
ISBN-13: 978-1455922970
f) Total Charge $ 6,323.99

Solar Maintenance Technician Program

a) Tuition Fee $18,950.00
b) Registration Fee $ 100.00
c) Lab Fee $ 150.00
d) First Aid CPR/AED $ 75.00
e) Book(s) (Cost) $528.00 (Student's responsibility)
1) Photovoltaic Systems
by Jim Dunlop
ISBN: 9780826913081
Price: $75.00
2) National Electrical Code 2023 Handbook - NFPA
ISBN: 9781455928389
Price: $160.00
3) NFPA 70E: Electrical Safety in the Workplace (2024)
ISBN: 978-1455922970
Price: $110.00
4) Battery Energy Storage Guide for Grid-Connected Solutions - IEEE Standards
ISBN: 9781504491642
Price: $50.00

5) Mastering SCADA: A Comprehensive Guide
   by Kris Hermans
   ISBN: 9798374121892
   Price: $60.00
6) Operations and Maintenance of Solar Farms
   by J. Paska
   ISBN: 9781032365406
   Price: $45.00
7) Leadership Is Language
   by L. David Marquet
   ISBN: 9780735217539
   Price: $28.00

f) Total Charge $19,275.00

Construction Electrician Program

a) Tuition Fee $16,570.00
b) Registration Fee $ 100.00
c) Lab Fee $ 600.00
d) Basic Life Support (BLS) $ 75.00
e) Books (Estimated Cost) $480.00 - $700.00 (Student's responsibility)
   1) National Electrical Codebook, 70E by NFPA
      ISBN-13: 978-1455922970
   2) Mike Holt's Illustrated Guide to Basic Electrical Theory 3rd edition by Mike Holt
      ISBN-13: 978-1932685398
   3) OSHA Construction Safety handbook 6th edition
      ISBN-13: 978-1602878914
   4) Mike Holt's Illustrated Guide to Understanding the Basic Motor Controls by Mike Holt
      ISBN-13: 978-0999203842
   5) House Wiring 5th edition by Cengage
      ISBN-13: 978-1337402415
   6) Commercial Electrical Wiring 17th edition by Cengage
      ISBN-13: 978-0357137697
   7) Electrical Estimating by Mike Holt, 2nd Edition
      ISBN-13: 978-1932685503
   8) Construction Management Jumpstart
      ISBN-13: 978-0470609996 2nd edition
      ISBN-13: 978-1119451013 3rd edition
f) Total Charge $ 17,345.00

Comprehensive Dental Assisting

a) Tuition Fee $15,500.00

b)	Registration Fee	$ 100.00
c)	Background Check	$ 10.00
d)	Drug Test	$ 25.00
e)	Lab Fee	$ 350.00
f)	Basic Life Support (BLS)	$ 65.00
g)	Uniform (Navy Blue Scrub) (Cost)	$ 40.00
h)	Book(s) (Cost)	$180.00 (Student's responsibility)
	Modern Dental Assisting 12th Edition Publisher: Elsevier Textbook ISBN: 9780323430302 Student Workbook ISBN: 9780323430319	
i)	Total Charge	$ 16,270.00

Comprehensive Medical Billing & Coding Specialist

a)	Tuition Fee	$16,721.00
b)	Registration Fee	$ 100.00
c)	Lab Fee	$ 550.00
d)	Basic Life Support (BLS)	$ 65.00
e)	Book(s) (Cost)	$1,064.00 (Student's responsibility)

1) Medical Terminology & Anatomy for coding 4th Edition by Betsy J. Shiland
2) Buck's Step-by-Step Medical Coding, 2021 Edition
   Publisher: Elsevier Inc
3) Buck's Workbook Step-by-Step Medical Coding, 2021 Edition
   Publisher: Elsevier Inc
4) Health Insurance Today, 6th Edition by Janet I. Beik
5) Workbook for Health Insurance Today, 6th Edition by Janet I. Beik
6) The Electronic Health Record for the physician's office, 3rd Edition by Julie Pepper
   Publisher: Elsevier
   ISBN: 9780323642651
7) Kinn's The Administrative Medical Assistant, 14th Edition by Brigitte Niedzwiecki, RN, MSN, RMA, Julie Pepper, BS, CMA (AAMA) and P. Ann Weaver, MSEd, MT(ASCP)
8) Study Guide for Kinn's the Administrative Medical Assistant, 14th Edition by Brigitte Niedzwiecki, RN, MSN, RMA, Julie Pepper, BS, CMA (AAMA) and P. Ann Weaver, MSEd, MT(ASCP)
9) Simchart for the Medical Office: Learning the Medical Office Workflow (Updated Edition)
   Publisher: Elsevier Inc
10) Buck's 2021 HCPCS Level II
    Publisher: Elsevier Inc
11) CPT Professional 2021 by American Medical Association Inc
12) Buck's 2021 ICD-10-CM for Physicians
    Publisher: Elsevier Inc

j) Total Charge $ 18,500.00

Substation Technician Program

a) Tuition Fee $18,235.00
b) Registration Fee $ 100.00
c) PPE, Hand Tools, Cotton Shirt (Cost) $ 150.00 (Student's responsibility)
d) Basic Life Support (BLS) $ 65.00
e) Book(s) (Cost) $950.00 (Student's responsibility)

1) Fundamentals of Electricity, Volume 2, Alternating Current by Consumer Energy
   Publisher: Alexander Publications
   ASIN: B004C36NWK
2) An Introduction to Electric Power Distribution by Wayne Beaty
   Publisher: Alexander Publications
   ASIN: B00UF1ZHA
3) Safe work Practices by Tampa Electric
   Publisher: Alexander Publications
   ASIN:
4) National Electrical Safety Code
   Publisher: Institute of Electrical and Electronics Engineers IEEE
   ISBN: (13) 978-1504419932
5) Substation Construction Guidelines by Njact and Alexander Publication
   Publisher: Alexander Publications
   ASIN: B007UJ10Q4
6) Substation Operation and Maintenance by Alexander Publication
   Publisher: Alexander Publications
   ASIN: B007UJ41S6
7) The Lineman's and Cableman's Handbook 13th Edition by Shoemaker and Mack
   Publisher: McGraw and Hill
   ISBN: 13-978-00718590032
8) Knots for Line workers and Becoming a Qualified Rigger
   Publisher: Alexander Publications
   ASIN: B007UISPAW & B007UIE2P4
9) Substation and Switchyard – Study Guide and DVD
   Publisher: Alexander Publications
   ASIN:
10) Construction Management Jumpstart by Barbara J Jackson
    Publisher: Willet Sybex Publishing
    ISBN: 13-978-0470609996
11) Fundamentals of Electricity, Volume 2, Alternating Current by Consumers Energy
    Publisher: Alexander Publications
    ASIN: B004C36NWK
12) An Introduction to Electric Power Distribution by Wayne Beaty

Publisher: Alexander Publications
ASIN: B007UF1ZHA

13) Safe Work Practices by Tampa Electric
Publisher: Alexander Publications
ASIN:

14) National Electrical Safety Code
Publisher: Institute of Electrical and Electronics Engineers
ISBN: 13-978-1504419932

f) Total Charge $ 19,500.00

Comprehensive Patient Care Technician/Assistant Program

a) Tuition Fee $18,092.00
b) Registration Fee $ 100.00
c) Background Check $ 10.00
d) Drug Test $ 45.00
e) Basic Life Support (BLS) $ 65.00
f) Uniform (Navy Blue Scrub) (Cost) $ 63.00
g) Book(s) (Cost) $1000-$2000 varies (Student's responsibility)

1) Phlebotomy Essentials 7th Edition
Publisher: Jones & Bartlett Learning
ISBN: 9781284224450
2) Medical Terminology, Quick & Easy, 9th Ed. by Peggy C. Leonard
Publisher: Elsevier
ISBN: 9780323595995
3) Electrocardiography for Healthcare Professionals 5th Edition by Kathryn Booth and Thomas O'Brien
Publisher: McGraw-Hill
ISBN: 9781260266580
4) Fundamentals Concepts and Skills for the Patient Care Technician 1st Edition by Kimberly Townsend
Publisher Elsevier
ISBN: 9780323430135
5) Physical Therapy Aide Textbook Series I
Publisher OPRET Education
ISBN: 978-1-944471-75-0

k) National/State Examination Fees:

1) American Medical Certification Association (AMCA)
   i. Essential Soft Skills (Self-Study Material and Exam) worth 10 CEU credits towards AMCA Certification $160.00 (Student's responsibility)
   ii. Physical Therapy Technician/Aide Certification $125.00 (Student's responsibility)
2) National Healthcare Association (NHA)

i. Certified EKG Technician (CET) $125.00 (Student's responsibility)
ii. Certified Phlebotomy Technician (CPT) $125.00 (Student's responsibility)
iii. Certified Patient Care Technician (CPCT) $160.00 (Student's responsibility)

l) Total Charge $ 18,375.00

Residential Wiremen Program

a) Tuition Fee $8,225.00
b) Registration Fee $ 100.00
c) Lab Fee $ 300.00
d) First Aid CPR AED (Heart saver) $ 75.00
e) Books (Cost) $190-$400 varies (Student's responsibility)
   1) Mike Holt's Illustrated Guide to Basic Electrical Theory 3rd edition by Mike Holt (ISBN-13: 978-1932685398)
   2) House Wiring 5th edition by Cengage (ISBN-13: 978-1337402415)
   3) *2017 National Electrical Code Book, NFPA 70* (ISBN: 978-1455922970)

f) Total Charge $ 8,700.00

SEMINARS FEES AND CHARGES

CMA Re-Certification Seminar

Meaningful Use Initiative-CMA Re-Certification (CMA-RECERT801) Seminar Fees and Charges: The seminar fee is $505.00, and include study materials such as Printed Study Guide, Online Practice Test, and NHA Certification Exam

EKG Technician Seminar

Seminar Fees and Charges: Seminar $675.00, Book $84.00, Navy Blue Uniform $40, National Certification Examination $117.00, Study Guide and Online Practice Exam $69 = Totaling $985.00.

Phlebotomy Technician Seminar

Seminar Fees and Charges: Seminar $1,450.00, Book $115.00, Navy Blue Uniform $40, National Certification Examination $117.00, Study Guide and Online Practice Exam $69 = Totaling $991.00

SCHOOL CALENDAR

a) Holidays to be observed: December 31st, January 1st, (New Year's), January 2nd, (Day After New Year's Day), Martin Luther King Jr, President Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Day before Thanksgiving Day, Thanksgiving Day, Day after Thanksgiving, December 24th (Day before Christmas Day), December 25th (Christmas Day), December 26th, (Day After Christmas Day).

b) Enrollment Periods: Thirty (30) days prior to each Program's start date.
c) Scheduled Vacation Periods: None

NORMAL HOURS OF OPERATION

School: Monday through Friday 8:00 am – 10:00 pm.

Office: Monday through Friday 8:00am – 5:30pm and Saturday 9:00am- 2:00pm or by appointment.

Table 1: CLASS SCHEDULE FOR EACH PROGRAM OFFERED

Program Name	Class Schedule
Clinical Medical Assistant	220 Total Clock Hours (18.3 weeks) Monday, Wednesday, and Friday (4 hrs. per day) 8:30 am – 12:30 pm 1st Break: 9:40 am – 9:50 am (10 min) 2nd Break: 11:00 am – 11:10 am (10 min)
Nursing Assistant Program	100 Total Clock Hours (8.3 weeks) Monday, Tuesday, and Wednesday (4 hrs. per day) 1:30 pm – 5:30 pm 1st Break: 2:50 pm – 3:00 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Comprehensive Clinical Medical Assisting Program	600 Total Clock Hours (Approx.26.6 weeks) Mon - Friday (4.5 hrs. per day) 8:00 am – 12:30 pm 1st Break: 9:40 am – 9:50 am (10 min) 2nd Break: 11:00 am – 11:10 am (10 min)
Orthodontic Assisting	144 Total Clock Hours (Approx. 12 weeks) Tuesday, Wednesday, and Thursday (4 hrs. per day) 1:30 pm – 5:30 pm 1st Break: 2:50 pm – 3:00 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Electronic Health Record Specialist (EHRS) Program	64 Total Clock Hours (8 weeks) Tuesday and Thursday (4 hrs. per day) 1:30 pm – 5:30 pm 1st Break: 2:40 pm – 5:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm
Patient Care Technician/Assistant (PCT/A)	216 Total Clock Hours (Approx. 11 weeks) Monday thru Friday (4 hrs. per day) 1:00 am – 5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:20 pm – 4:30 pm (10 min)
Medical Administrative Assistant	168 Total Clock Hours (Approx. 9 weeks) Monday thru Friday (4 hrs. per day) 8:30 am-12:30 pm 1st Break: 9:40 pm – 9:50 pm (10 min) 2nd Break: 11:00 pm – 11:10 pm (10 min)

Pharmacy Technician	144 Total Clock Hours (12 weeks) Monday, Wednesday, and Friday (4 hrs. per day) 5:30 pm – 9:30 pm 1st Break: 6:40 pm – 6:50 pm (10 min) 2nd Break: 8:10 pm – 8:20 pm (10 min)
Medical Billing and Coding Specialist Program	344 Total Clock Hours (Approx. 17 weeks) Monday thru Friday (4 hrs. per day) 1:00 pm-5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Solar Energy Technician	120 Total Clock Hours (6 weeks) Mon thru Friday (4 hrs. per day) 8:30 am – 12:30 pm 1st Break: 9:40 am – 9:50 am (10 min) 2nd Break: 11:00 am – 11:10am (10 min) Saturday 10:00 am-2:00 pm 1st Break: 11:40 am – 11:50 am (10 min) 2nd Break: 1:00 pm – 1:10 pm (10 min)
Solar Maintenance Technician Program	360 Total Clock Hours (15 weeks) Mon thru Friday (4 hrs. per day) 8:30 am – 12:30 pm 1st Break: 9:40 am – 9:50 am (10 min) 2nd Break: 11:00 am – 11:10am (10 min)
Construction Electrician Program	490 Total Clock Hours (24.5 weeks) Monday thru Friday (4 hrs. per day) 1:00 pm-5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Comprehensive Dental Assisting	600 Clock hours (30 weeks) Monday-Friday (4 hrs. per day) 5:30-9:30 pm 1st Break 2:50 pm - 3:00 pm 2nd Break 4:00 pm - 4:10 pm
Comprehensive Medical Billing & Coding Specialist	428 Total Clock Hours (Approx. 22 weeks) Monday thru Friday (4 hrs. per day) 1:00 pm-5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm(10 min)
Substation Technician Program	440 Total Clock Hours (22 weeks) Monday thru Friday (4 hrs. per day) 1:00 pm-5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Comprehensive Patient Care Technician/Assistant	412 Total Clock Hours (Approx. 20 weeks) Monday thru Friday (4 hrs. per day) 1:00 pm-5:00 pm 1st Break: 2:40 pm – 2:50 pm (10 min) 2nd Break: 4:00 pm – 4:10 pm (10 min)
Residential Wireman Program	160 Clock hours (8 weeks) Monday thru Friday (4 hrs. per day) 5:30-9:30pm

	1st break: 6:30pm-6:40pm (10 min) 2nd break: 7:30pm-7:40pm (10 min) 3rd break: 8:30pm-8:40pm (10 min)

ADMISSION/ENROLLMENT POLICIES

a) **Minimum Age**: Eighteen (18) years old

b) **Specific Entrance Requirements:** Any proof of education or documents of a foreign language must be translated into English, notarized, and approved by the school prior to registration.

1) Two valid forms of Government Issued Identification (one must have a photo)
2) Proof of GED, High School Diploma/Transcript, or College Diploma/Transcript
3) Immunization Record for Student Record file: Hep-B series, MMR, PPD (within the last twelve (12) months), Tetanus (within the last ten (10) years), and Varicella/Chickenpox (proof of disease or vaccination)
4) Pass a Five (5) Panel Urine Drug Screen (administered on-site) and pass a background check (administered on site) through the Texas Department of Public Safety (DPS) for screening on sexual and drug offenses (Civil or Criminal). Failure may indicate some individuals are ineligible for employment as an allied health career professional.

i. Prospective students of the ***Pharmacy Technician Program*** must not have any drug-related charges, felony charges, and/or convictions of any kind **within three (3) years**.

ii. Prospective students of the: ***Clinical Medical Assistant, Comprehensive Clinical Medical Assistant, Electronic Health Records (EHR), Medical Billing and Coding Specialist, Comprehensive Medical Billing and Coding Specialist, Medical Administrative Assistant, Patient Care Technician/Assistant, Comprehensive Patient Care Technician/Assistant, and Nursing Assistant,*** must not have been charged with and/or convicted of any felony offenses for **the past three (3) years**.

iii. Orthodontic Assistant Admissions Requirements:

1. Minimum Age: Eighteen (18) years old
2. Specific Entrance Requirements: Any proof of education or documents of a foreign language must be translated into English, notarized, and approved by the school.
3. Two valid forms of Government Issued Identification (one must have a photo)
4. Proof of:
    a. Certified Dental Assistant or.
    b. Registered Dental Assistant or.
    c. A minimum of 3,500 hours of work experience as an orthodontic assistant accrued over a period of at least two years to a minimum of four years; employment must be endorsed or verified by a licensed dentist/orthodontist.
5. Pass Five (5) Panel Urine Drug Screen (administered on-site); and

6. Pass a background check (administered on site) through the Texas Department of Public Safety (DPS) civil or criminal offenses that may bar an individual from employment as an allied health career professional. Prospective students of the ***Orthodontic Assistant*** program must not have been charged with and/or convicted of any felony offenses **for the past three (3) years**.
7. Immunization Record for Student Record file: Hep-B series, MMR, PPD (within the last twelve (12) months), Tetanus (within the last ten (10) years), and Varicella/Chickenpox (proof of disease or vaccination)
8. **Tour of the School**: Prospective students are encouraged to tour the school prior to enrollment and must attend the orientation held on the first day of the class.

STUDENT INFORMATION

Professional Conduct of Students

An essential element of training at TTCCT includes the development of professionalism. The high standards maintained in TTCCT programs prepare each student to meet the optimal expectations of employers. Training Center of Central Texas, LLC expects students to conduct themselves in a socially acceptable manner at all times. Students partaking in the following forms of misconduct are subject to immediate dismissal from the premises and/or termination from the program:

- Academic dishonesty of any type, including cheating, plagiarism, and knowingly furnishing false information to the institution, forgery, alteration, or use of institution identification documents with the intent to defraud
- Intentional disruption or obstruction of teaching, administration, disciplinary proceedings, public meetings, and programs, or other school activities
- Physical or verbal abuse of any person on school premises or at school-sponsored or supervised functions
- Theft of school property, damage to school premises, or the property of a member of the school community on school premises
- Failure to comply with directions of school officials acting in the performance of their duties.
- The use, possession, or distribution of alcoholic beverages, controlled substances, firearms, weapons, explosives, and/or dangerous chemicals on school premises
- Any violation of Federal, State, or local law on school premises or at school-sponsored functions

Training Center of Central Texas, LLC views excessive tardiness as a violation of the professional conduct philosophy that could lead to dismissal. Any violation or transgression will be strictly penalized. Training Center of Central Texas, LLC reserves the right to make the administrative and educational decisions as to whether the code of conduct has been violated. All cases are reviewed individually.

Confidentiality of Student Records

All student records are kept on file. Files are confidential and are made available for approved purposes only. In accordance with the Family Educational Rights & Privacy Act of 1974, the TTCCT will not release

educational records to unauthorized persons without prior written consent from a student, a parent, or a legal guardian. The TTCCT will keep student records for five years from the student's graduation or termination date.

Professional Conduct Standards

An important aspect of the training methodology includes the development of professional attitude and behavior. Prospective employers seek employees who are professional assets and will be positive additions to their companies. Therefore, we have created a "work-like" environment where our students can grow and develop according to these professional expectations. Learning how to communicate and deal with different situations, coping with frustration, skills for solving problems, disciplining oneself, and dressing professionally are just a few of the ingredients that go into the makeup of a "professional". In these areas, we have high standards because we are committed to preparing our students for employers' highest expectations. Students are required to always wear navy blue scrub suit uniform, including lecture, clinical lab, and externship site.

POLICY FOR GRANTING CREDIT

Credit (in terms of prior education and training, subject knowledge, or clinical or externship hours) toward program completion is at the School Director's discretion. After assessing a prospective student's documentation, the School Director may direct enrollment agents to reflect an appropriate amount of credit in any of the school's training programs. If the student has acceptable proof of credit from another school or institution, reduced tuition fees may be applied accordingly.

POLICIES OF CANCELLATION AND REFUND

Cancellation Policy

A full refund will be made to any student who cancels the enrollment contract within 72 hours (until midnight of the third day excluding Saturdays, Sundays, and legal holidays) after the enrollment contract is signed. If a student attended any scheduled classes, a refund calculation would be implemented (does not apply to Seminars).

Refund Policy

a) Refund computations will be based on the scheduled course time of class attendance through the last date of attendance. Leaves of absence, suspensions, and school holidays will not be counted as part of the scheduled class attendance.
b) The effective date of termination for refund purposes will be the earliest of the following:
    1) The last day of attendance, if the school terminates the student.
    2) The date of receipt of written notice from the student; or
    3) Ten school days following the last date of attendance
c) The student will be refunded the prorated portion of tuition, fees, and other charges that the number of hours remaining in the amount of the program for which the student has been charged after the effective date of termination bears to the total number of hours in the portion of the program for which the student has been charged. If tuition and fees are collected in advance of

entrance, and if after expiration of the 72-hour cancellation privilege the student does not enter school, not more than $100 in nonrefundable administrative fees shall be retained by the school for the entire residence program or synchronous distance education course.

d) If a student enters a residence or synchronous distance education program and withdraws or is otherwise terminated, the school or college may retain not more than $100 in nonrefundable administrative fees for the entire program. The minimum refund of the remaining tuition and fees will be the prorated portion of tuition, fees, and other charges that the number of hours remaining in the portion of the course or program for which the student has been charged after the effective date of termination bears to the total number of hours in the portion of the course or program for which the student has been charged, except that a student may not collect a refund if the student has completed 75 percent or more of the total number of hours in the portion of the program for which the student has been charged on the effective date of termination.

e) Refunds for extra expense items to the student, such as books, tools, or other supplies, should be handled separately from refund of tuition and additional academic fees. The student will not be required to purchase instructional supplies, books, and tools until these materials are needed. Once these materials are purchased, no refund will be made. For full refunds, the school can withhold costs for these types of items from the refund if they were necessary for the portion of the program attended and separately stated in the enrollment agreement. Any such items not required for the portion of the program attended must be included in the refund.

f) A student who withdraws for a reason unrelated to the student's academic status after the 75 percent completion mark and requests a grade at the time of withdrawal shall be given a grade of "incomplete" and permitted to re-enroll in the course or program during the 12-month period following the date the student withdrew without payment of additional tuition for that portion of the course or program.

g) A full refund of all tuition and fees is due and refundable in each of the following cases:
    1) Enrollees are not accepted by the school.
    2) If the course of instruction is discontinued by the school and this prevents the student from completing the course; or
    3) If the student's enrollment was procured because of any misrepresentation in advertising, promotional materials of the school, or representations by the owner or representatives of the school
    4) Students are entitled to a full refund for classes attended if the school does not provide a class with an approved instructor by TWC

A full or partial refund may also be due in other circumstances of program deficiencies or violations of requirements for career schools and colleges.

Note: A school may withhold the transcript and certificate of completion until the student has paid his/her outstanding financial obligations to the school.

"Any holder of this consumer credit contract is subject to all claims and defenses which the debtor could assert against the seller of goods or services obtained pursuant hereto or with the

proceeds hereof. Recovery hereunder by the debtor shall not exceed the amounts paid by the debtor hereunder."

h) REFUND POLICY FOR STUDENTS CALLED TO ACTIVE MILITARY SERVICE.
A student at the school or college who withdraws from the school or college as a result of the student being called to active duty in a military service of the United States or the Texas National Guard may elect one of the following options for each program in which the student is enrolled:
   1) If tuition and fees are collected in advance of the withdrawal, a prorated refund of any tuition, fees, or other charges paid by the student for the program and cancellation of any unpaid tuition, fees, or additional charges owed by the student for the portion of the program the student does not complete following withdrawal.
   2) A grade of incomplete with the designation "withdrawn-military" for the courses in the program, other than courses for which the student has previously received a grade on the student's transcript, and the right to re-enroll in the program or a substantially equivalent program if that program is no longer available, not later than the first anniversary of the date the student is discharged from active military duty without payment of additional tuition, fees or other charges for the program other than any previously unpaid balance of the original tuition, fees, and charges for the textbooks; or
   3) The assignment of an appropriate final grade or credit for the courses in the program, but only if the instructor or instructors of the program determine that the student has:
      i. Satisfactorily completed at least 90 percent of the required coursework for the program; and
      ii. Demonstrates sufficient mastery of the program material to receive credit for completing the program.

i) The payment of refunds will be totally completed such that the refund instrument has been negotiated or credited into the proper account(s) within 60 days after the effective date of termination.

More simply, the refund is based on the precise number of hours the student has paid for, but not yet used, at the point of termination, up to the 75% completion mark, after which no refund is due. Form PS-1040R provides the precise calculation

For VA Students Refund Policy

In the event a veteran or other eligible student fails to enter the course, or withdraws or is discontinued therefrom at any time prior to completion of the approved program length for VA students, the amount charged to the student for tuition, fees, and other charges for the completed portion of the course shall not exceed $10.00 (only if a registration fee is charged) plus the pro rata portion of the total charges for tuition, fees, and other charges that the length of the completed portion of the course bears to its total length. The completed portion is the total number of days the students were scheduled to attend (from first to the last date of attendance) multiplied by the scheduled hours of attendance per day. **Refund will be totally consummated within the forty**

(40) days after termination. The form SAA-NON 10/01/13, the VA Refund Worksheet, will be used for proper refund calculation.

PROGRAMS

Clinical Medical Assistant

a) The Clinical Medical Assistant (CMA) Program's objective/purpose is to train students in the skills necessary for employment in any modern medical facility. A qualified Medical Assistant student can perform a wide range of duties with a variety of technical details, thus helping a physician in many clinical situations.
b) Work Setting to find employment: Clinics, Hospitals, Medical Laboratories
c) Length of time required for completion of the Program: 18.3 weeks classroom academic time and 160 hours Externship.
d) Additional Requirements for completion: Final Grade Point Average (GPA) of seventy percent (70%) or above.
e) Type of Certificate awarded: Certificate of Program Completion from TTCCT. Students will be eligible to take/challenge the National Examination, and the fee of $155.00 will be charged to become a **Certified Clinical Medical Assistant** through the National Healthcareer Association (NHA).

Table 2: PROGRAM OUTLINE - CLINICAL MEDICAL ASSISTANT

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
CMA 1	Understanding the Profession	08	00	00	08
CMA 2	The Administrative Medical Assistant & Managing the Finances	30	09	00	39
CMA 3	The Clinical Medical Assistant & Clinical Duties	50	43	00	93
CMA 4	The Clinical Laboratory	33	38	00	71
CMA 5	Career Strategies	09	00	00	09
CMA 6	Externship	00	00	160	160
Total Contact Hours Required for Completion		**130**	**90**	**160**	**380**

Program Description

Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by a physician.

Course Overview

Healthcare is changing; however, the role of Clinical Medical Assistant (CMA) is a versatile healthcare member and is one of the most important members of the success in physician practice. Clinical Medical Assistant skills may vary among medical offices. Education and training are an exciting field of medical assisting, and this program will prepare students for a variety of clinical and administrative skills, making the CMAs an essential part of the health care team. According to data from 2012 with the Bureau of Labor Statistics, the average clinical medical assistant earned $14.69 an hour, which equates to $30,550 per hour annually. The job outlook for this profession is 29% between 2012 and 2022, which is much faster than the national average. If you get the right education for this career, prospective students should have no trouble finding a job once the student has completed the course.

Comprehensive Clinical Medical Assisting Program

a) Objective and Purpose: To train students on practical experience to become Certified Clinical Medical Assistant
b) length of time required for completion of the program: Classroom Academic=212 clock hours, Laboratory = 228 clock hours, Externship = 160. TOTAL = 600 clock hours.
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above.
d) Type of Certificate awarded: Certificate of programs completion from TTCCT. Student may challenge the national examination from National Healthcare Association (NHA) to become Certified Medical Administrative Assistant (CMAA), Certified EKG Technician (CET), Certified Phlebotomy Technician (CPT) and Certified Clinical Medical Assistant (CCMA).
e) Occupation Classification: Clinical Medical Assistant performs administrative and certain clinical duties under the direct supervision of a physician, nurses, and other healthcare professionals. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, performing EKG, and administering medications as directed by physician.
f) Work Setting: Clinical Medical Assistant may work in clinics, hospitals, medical facilities, and medical insurance companies.
g) This course will be conducted entirely on-site, with all instruction taking place at our facility. Students will engage directly with instructors in a classroom setting, ensuring comprehensive hands-on learning and immediate support.

Subject	**Subject title**	**Total Hrs Lec – Lab – Ext – Total**			
CCMA 1	Medical Terminology	16	16	00	32
CCMA 2	The Medical Administrative Assisting	64	64	00	128
CCMA 3	The Clinical Medical Laboratory Assisting	72	88	00	160

CCMA 4	Introduction to Clinical Medical Assisting	56	56	00	112
CCMA 5	Career Strategies	04	04	00	08
CCMA 6	Externship	00	00	160	160
Total Contact Hours Required for Completion		**212**	**228**	**160**	**600**

Program Description:

This program is a Comprehensive Clinical Medical Assistant that will provide patient care, with the emphasis on performing clinical and administrative tasks such as appointments scheduling, maintaining medical records, insurance filing. Clinical duties may include taking and recording vital signs and medical histories, preparing examination room, assisting minor surgery, drawing blood and collecting specimens, perform EKG, glucose cholesterol testing, administering medications, measuring height and weight, urinary catheterization (male and female), and other minor medical procedures under direct supervision of physicians, nurses, and other healthcare professionals.

Course Overview

Healthcare is changing; however, the role of Clinical Medical Assistant (CMA) is versatile healthcare member and is one of the most important members of the success in physician practice. Clinical Medical Assistant skills may vary among medical offices. The education and training are exciting fields of medical assisting, and this program will prepare students for a variety of clinical and administrative skills, making the CMAs an essential part of the health care team. According to data from 2020 with the Bureau of Labor Statistics, the average clinical medical assistant earned $17.23 an hour, which equates to $35,850 a year. The job outlook for this profession is 19% between 2019 and 2029, which is much faster than the national average. If you get the right education for this career, prospective students should have no trouble finding a job once the student completes the course.

Electronic Health Records Specialist (EHRS) Program

a) The Electronic Health Records Specialist Program's objective/purpose is to train students in the usage and management of Electronic Health Record
b) Length of time required for completion of the program: Eight (8) weeks classroom academic and laboratory/clinical
c) Additional requirements for completion: Final GPA of seventy (70%) or above
d) Type of Certificate awarded: Certificate of programs completion from TTCCT. Upon completion of the program students may challenge the National Healthcareer Association (NHA) exam to become a Certified Electronic Health Record Specialist (CEHRS)
e) Electronic Health Record Specialist's duties will vary with size and the specialty of the facility in which they work. Many can specialize in various areas or one aspect of the EHR such as entry level coders, encoding within a hospital setting, abstractors and or coding specialist, HIPAA Compliance Officers or Health Information Managers (HIM) and manage entire departments within larger healthcare facilities. The duties an electronic health records specialist may perform include but are not necessarily limited to

Table 3: Electronic Health Records Specialist (EHRS) Program

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
EHR101	Introduction to Electronic Health Records	04	00	00	04
EHR102	Overview of SimChart for the Medical Office	04	04	00	08
EHR103	Privacy, Confidentiality, and Security	04	04	00	08
EHR104	Implementing Electronic Health Records	04	04	00	08
EHR105	Administrative Use of the Electronic Health Record	04	04	00	08
EHR106	Clinical Use of the Electronic Health Record	04	04	00	08
EHR107	Using the Electronic Health Records for Reimbursement	04	04	00	08
HER108	The Personal Health Record	04	04	00	08
Total Contact Hours Required for Completion		**32**	**32**	**00**	**64**

Program Description

EHR Specialist's duties will vary with size and specialty of the facility in which they may work. Many can specialize in varying areas or one aspect of the EHR such as entry level coders, encoding within a hospital setting, abstractors and or coding specialist, HIPAA Compliance Officers or Health Information Managers (HIM) and be over entire departments within larger healthcare facilities. The duties an electronic health records specialist may perform include but not necessarily be limited to:

a) Assemble patient's health information to ensure information is complete and accurate.
b) Enter data, such as demographic characteristics, history and extent of disease, diagnostic procedures and treatment into computer.
c) Statistical and Data Analysis for Quality Improvement Measures (QIM).
d) Assist with special studies and research for public health agencies.
e) Compile medical care and census data for statistical reports on diseases treated, surgery performed, and use of hospital beds for clinical audits.
f) Manage data backup, retention of records as well as maintain a variety of health record indexes, storage and retrieval systems.
g) Work National Database Registries as a registrar, contacts and discharged patients, their families, and physicians to maintain registry with follow-up information, such as quality of life and length of survival of cancer patients.
h) Work with department managers, to review policies and develop new workflows for EHR, coordinates training resources and provides on-going end user training.
i) Assist with the daily operations of the office. Duties may include answering the phone, inputting notes from patient's charts, scheduling appointments and general reception area duties.

Course Overview

a) Demonstrate understanding of the reasons for which the integration of technology into healthcare is necessary.
b) Demonstrate skill and competence in the operation of the EHR, as well as compliance with clinical standards.
c) Demonstrate knowledge of the basic concepts in health data management in conjunction with an understanding of the importance of proper database management in healthcare setting.
d) Define and understand privacy, confidentiality, and security in healthcare and the relationship to electronic health record and health information management.
e) Understand appropriate electronic means of communications with patients, particularly the use of mobile and wireless communication in healthcare. (Fax, mobile phone, and e-mail).

Chapter 1 Objectives

1) Explore the history and current use of patient records, their importance to individuals' health, and their contribution to the healthcare system.
2) Become familiar with the content of a typical electronic health record (EHR).
3) Define documentation and explain who documents are in the medical records.
4) Discuss ownership of the health record.
5) List and explain the eight core functions of ab EHR.
6) Describe the basic functions and advanced clinical decision support features of EHR software.
7) Define practice management software and explain how it is used with the EHR system.
8) Describe the advantages and disadvantages of EHR systems.
9) Discuss EHR adoption rates and who is using EHR systems.
10) Identify the roles of various healthcare professionals in implementing an EHR system.
11) Investigate various professional organizations aimed at promoting the use of EHR system

Chapter 2 Objectives

1) Describe the medical assistant's role in promoting electronic health records.
2) Log in to SimChart for Medical Office (SCMO).
3) Find and use the Student Resources available for SMCO.
4) Understand how to view and submit assignments in SCMO.
5) Access the SCMO Simulation Playground and navigate across modules.
6) Identify common buttons and other recurrent elements in SMCO.
7) Explain the difference between active and closed records.
8) Create new patient records in SCMO.
9) Discuss the appropriate use of the Internet in the physician's office.

Chapter 3 Objectives

1) Discuss privacy as both a philosophic and legal concept.
2) Explore the history and scope of HIPAA.
3) List the four implementation specifications required by the administrative safeguards outlined in the HIPAA Security Rule and explore ways in which they might apply to a small to medium-size medical practice.

4) Assess and complete forms related to patient privacy and security in the electronic health record (EHR).
5) Become familiar with patients' rights under HIPAA and explore how they affect the EHR.
6) Identify organizations aimed at securing EHR systems.
7) Identify who is allowed access to the information in a patients' EHR and under what circumstances.
8) Describe the role of consumer reporting agencies and prescription database tools and explain how they are regulated.
9) Discuss ways patients can protect their health information

Chapter 4 Objectives

1) Explain the considerations that must be addressed in planning a successful transition from paper charts to electronic health record (EHR) systems.
2) Develop a conversation plan for the EHR.
3) Explain the requirements of the Centers for Medicare & Medicaid Services (CMS) meaningful use program for eligible professionals.
4) Describe the information in a practice should supply to each software vendor in its request for proposal document and outline the information the practice expects to receive from the vendors in return.
5) Give examples of the workflow processes that must be redesigned when an EHR system is implemented.
6) Outline the process of collecting and entering data from paper sources into the EHR.
7) Discuss common problems that may be encountered when information is transferred from paper charts to EHR systems.
8) Identify specific challenges that may arise in training to use a new EHR system.
9) Indicate how patients can be introduced to the new EHR system.
10) Specify the contingency plans that must be in place before an EHR is launched.
11) Discuss the EHR implementation process.
12) Explain how the success of an EHR can be measured after the transition period ends.

Chapter 5 Objectives

1) Explain the importance and typical duties of the front office assistant.
2) Discuss the necessity of respectful communication among providers, staff, and patients when answering the telephone, sending email, messaging, faxing, and scheduling appointments.
3) Create a telephone message in SimChart for the Medical Office (SCMO).
4) Explain why a provider might send a letter to a healthcare provider or patient and learn how to create one in an EHR.
5) Generate patient correspondence in SCMO.
6) Outline the procedure for the management of EHRs, including eliminating duplicate charts, the proper way of purging closed patient records, and the importance of backing up the EHR.
7) Create and manage patient appointments in the calendar.
8) Discuss the role of the front office in maintaining the waiting room.

Chapter 6 Objectives

1) Describe the benefits of documentation in the EHR.
2) Explain the role of speech recognition software in medical documentation and describe the benefits of the technology.
3) List the components of the medical, surgical, family, and social history.
4) Explain how the chief complaint and history of the present illness relate to each other.
5) Enter allergies, medications, and intolerances into the EHR.
6) Discuss what components of patient's vaccination history should be included in the chart.
7) Describe how to record vital signs and anthropometric measurements in the EHR.
8) Outline the process many physicians use for constructing a progress note.

Chapter 7 Objectives

1) Discuss the role of the patient, the provider, and the third-party payer in the medical reimbursement process.
2) Define medical coding.
3) Discuss diagnostic coding classifications and outline the CPT-4 coding system.
4) Evaluate the advantages and disadvantages of the pay-for-performance (P4P) incentive model.
5) List the information contained in a typical Superbill and explain how the form is used in an outpatient facility.
6) Post charges, payments, and adjustments to a patient ledger.
7) Discuss the concept of medical necessity; indicate how it affects third-party reimbursement.
8) Complete the HIPAA 5010 complaint claims.
9) Complete a Day sheet.
10) Define fraud and abuse, explain the difference between the two, and give examples of each.

Chapter 8 Objectives

1) Define and explain the purpose of keeping a personal health record (PHR).
2) Describe the three ways of storing PHR data and outline the advantages and drawbacks of each.
3) Describe how a PHR can be synchronized with medical devices, such as blood pressure cuffs, blood glucose meters for patients with diabetes, and peak flow meters for patients with asthma.
4) Discuss the need for interoperability between PHR systems, EHRs systems, and related systems.
5) Explain how direct0to consumer laboratory services can help protect a patient's privacy.
6) discuss the benefits for consumers and for providers of creating a PHR.
7) Identify steps in setting up a PHR.
8) Identify steps in maintaining the PHR.

Medical Administrative Assistant

a) Objective and Purpose: To train students on practical and real-world experience the electronic documentation in any medical office
b) Length of time required for completion of the program: Nine (9) weeks classroom
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above
d) Type of Certificate awarded: Certificate of programs completion from TTCCT. Student may challenge the national examination from National Healthcare Association (NHA) to become a Certified Medical Administrative Assistant (CMAA)
e) Medical Administrative Assistant (MAA) duties will vary depending on the size and specialty of medical facilities, clinics, and laboratory. Medical Administrative Assistant may specialize in varying areas such as: office manager, entry level coders, encoding within a hospital setting, abstractors and coding specialist. This is a highly rewarding profession - and not only monetarily, Medical Assistants (also called a Medical Office Secretary or Medical Office Assistant) keep healthcare offices running efficiently and effectively and are often the first to greet and help patients, and can help set the stage for a patient's experience
f) Work Setting: Medical Administrative Assistant may work in clinics, hospitals, medical facilities, and medical insurance companies

Table 4: Medical Administrative Assistant

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
MAA 1	Medical Terminology	12	12	00	24
MAA 2	Introduction to Medical Assisting	06	06	00	12
MAA 3	Ambulatory Care Administration	12	12	00	24
MAA 4	Coding and Medical Billing Procedures	12	12	00	24
MAA 5	Medical Office Administrative Functions	12	12	00	24
MAA 6	Assisting with Medical Specialties and Career Development	12	12	00	24
MAA 7	Electronic Health Records Under SimChart for the Medical Office	20	160	00	36
Total Contact Hours Required for Completion		**86**	**82**	**00**	**168**

Program Description

This program will give students practical and real-world experience in electronic documentation in today's healthcare environment; simulating actual software used in hospitals nationwide. Students will utilize SimChart, an interactive electronic health record system that ensures students will have the necessary charting skills to be successful in any medical office settings. There are five modules in this program: Navigating SimChart for the Medical Office EHR, Front Office, Clinical Care, and Coding and Billing.

Course Overview

Over the years, the business side of medicine has grown more complex with increasing federal regulations and data collection needed to obtain proper reimbursement and to avoid penalties. Practices have more complicated coding requirements, and these requirements change frequently. There is a national plan to increase the use of health information exchange networks with penalties for practices that do not meet the requirements. (These systems require ever-increasing vigilance on the part of health care professionals as well as federal, state, policies, and procedures to protect patient security). New methods of protecting consumers from medical identity theft are being introduced. Changes contribute to the need for every strong administration of medical practices. Medical administrators and managers must be knowledgeable about competitions, marketing, technology, reimbursement, confidentiality, privacy, security, and relationships between physicians and other health care entities.

Upon completion of this course, the student will be able to:

MAA1 - Medical Terminology Objectives

- To increase familiarity and comfort in using the common medical terms.
- To correctly spell, pronounce, define and identify words
- To properly use medical terms and abbreviations correctly in written assignments
- To provide the complete meaning of a medical abbreviation
- To correctly construct singular and plural form of medical terms using root words, affix, and suffixes

MAA2 Introduction to Medical Assisting Objectives

- Competency-Based Education and the Medical Assistant Student
- The Medical Assistant and the Healthcare Team
- PROCEDURE 2-1: Locate a State's Legal Scope of Practice for Medical Assistants
- Professional Behavior in the Workplace
- Therapeutic Communication
- Patient Education
- Medicine and Law and Ethics

MAA3 Ambulatory Care Objectives

- Technology and Written Communication
- PROCEDURE 8-1: Compose Professional Correspondence, Business Letter and Professional Email Using Electronic Technology
- Telephone Techniques
- PROCEDURE 9-1: Demonstrate Professional Telephone Techniques
- PROCEDURE 9-2: Demonstrate Telephone Message and Report Relevant Information Concisely and Accurately
- Scheduling Appointment and Patient Processing
- PROCEDURE 10-1: Manage appointment Scheduling Using Established Priorities: Established the Appointment Matrix
- PROCEDURE 10-2: Manage Appointment Scheduling Using Established Priorities: Schedule New Patient

- PROCEDURE 10-3: Coach Patients Regarding Office Policies: Create the New Patient Brochure PROCEDURE 10-4: Manage Appointment Scheduling Using Established Priorities: Schedule and Established Patient
- PROCEDURE 10-5 Scheduled a Patient Procedure
- Daily Operations in the Ambulatory Care Setting
- PROCEDUE 11-1: Perform an Inventory with Documentation: Equipment Inventory PROCEDURE 11-2: Perform Routine Maintenance of Administrative or Clinical Equipment PROCEDURE 11-3: Perform and Inventory with Documentation: Perform and Inventory of Supplies While Using Popper Body Mechanics
- PROCEDURE 11-4: Prepare a Purchase Order
- The Health Record
- PROCEDURE 12-1: Create a Patient's Health Record: Register a New Patient in the Practice Management Software.
- PROCEDURE 12-2: Organize a Patient's Health Record: Upload Documents to the Electronic health Record
- PROCEDURE 12-3: Create and Organize a Patient's Paper Health Record PROCEDURE 12-4: File Patient Health Records
- Principles of Pharmacology
- PROCEDURE 13-1: Prepare of Prescription for the Provider's Signature

MAA4 Coding and Medical Billing Procedures

- Basic of Diagnostic Coding
- PROCEDURE 14-1: Perform Coding Using the Current ICD-10CM Manual
- Basic of Procedural Coding
- PROCEDURE 15-1: Perform Procedural Coding: Surgery
- PROCEDURE 15-2: perform procedural Coding: Office Visit and Immunizations
- Basic of Health Insurance
- PROCEDURE 16-1: Interpret Information on an Insurance Card PROCEDURE 16-2: Verify Eligibility of Services, Including Documentation PROCEDURE 16-3: Obtain a Referral with Documentation
- PROCEDURE 16-4: Obtain Preauthorization for a Surgical Procedure with Documentation
- Medical Billing and Reimbursement
- PROCEDURE 17-1: Show Sensitivity When Communicating with Patients Regarding Third-Party Requirements
- PROCEDURE 17-2: Perform Precertification with Documentation PROCEDURE 17-3: Complete an Insurance Claim Form
- PROCEDURE 17-4: Utilize Medical Necessity Guideline: Respond to a "Medical Necessity Denied" Claim
- PROCEDURE 17-5: Inform a Patient of Financial Obligation for Services Rendered

MAA5 Medical Office Administrative Functions

- Patient Account, Collections, and Practice Management
- PROCEDURE 18-1: Perform Accounts Receivable Procedures for Patient Accounts: Charges PROCEDURE 18-2: Perform Accounts Receivable Procedures in Patient Account: Payable and Adjustments

- Banking Services and Procedures PROCEDRUE 19-1: Prepare a Bank Deposit
- Supervision and Human Resource Management PROCEDURE 20-1: Prepare for a Staff Meeting
- Medical Practice Marketing and Customer Service
- PROCEDURE 21-1: Develop a Current List of Community Resources Related to Patients' Healthcare Needs and Facilitate Referrals.

MAA6 Assisting with Medical Specialties and Career Development

- Safety and Emergency practices
- PROCEDURE 22-1: Evaluate the Work Environment to Identify Unsafe Working Conditions and Comply with Safety Signs and Symbols
- PROCEDURE 22-2: Manage a Difficult Patient
- PROCEDURE 22-3: Demonstrate the Proper Use of Extinguisher
- PROCEDURE 22-4: Participate in a Mock Environmental Exposure Even: Evacuate a provider's Office
- PROCEDURE 22-5: Maintain an Up-to-Date List of Community Resources for Emergency Preparedness
- PROCEDURE 22-6: Maintain Provider/Professional-Level CPR Certification: Use an Automated External Defibrillator (AED)
- PROCEDURE 22-7: Perform Patient Screening Using Established Protocols: Telephone Screening and Appropriate Documentation
- PROCEDURE 22-8: Maintain Provider/Professional-Level CPR Certification: Perform Adult Rescue Breathing and One-Rescuer CPT: perform Pediatric and Infant CPR
- PROCEDURE 22-9: Perform First Aid Procedures Administer Oxygen
- PROCEDURE 22-10: Perform First Aid Procedures: Respond to an Airway Obstruction in an Adult
- PROCEDURE 22-11: Perform First Aid Procedures: Care for a Patient Who Has fainted or is in Shock
- PROCEDURE 22-12: Perform First Aid Procedures: Care for a Patient with Seizure Activity PROCEDURE 22-13: Perform First Aid Procedures: Care for a Patient with Suspected Fracture of the Wrist by Applying a Splint
- PROCEDURE 22-14: Perform First Aid procedures: Control Bleeding
- PROCEDURE 22-15: Perform First Aid Procedures: Care for a Patient with a Diabetic Emergency
- Career Development and Life Skills
- PROCEDURE 23-1: Prepare a Chronologic Resume PROCEDURE 23-2: Create a Cover Letter PROCEDURE 23-3: Complete a Job Application PROCEDURE 23-4: Create a Career Portfolio
- PROCEDURE 23-5: Practice Interview Skills during a Mock Interview PROCEDURE 23-6: Create a Thank -You Note for an Interview

MAA7 Electronic Health Records under SimChart for the Medical Office

- Understand the three modules that make up SimChart for the Medical Office
- Know how the Simulation Playground and Encoder feature work
- Understand the info panel for each of the modules in SimChart for the Medical Office
- Explain what an assignment is and what constitutes a reattempt of an assignment
- Comprehend the basic workflow steps associated with each of the modules in SimChart for the Medical Office
- Introduction to Electronics Health Records

- Overview of SimChart for the Medical Office
- Privacy, Confidentiality, and Security
- Implementing Electronic Health Records
- Administrative Use of the electronic Health Record
- Clinical Use of the Electronic Health Record
- Using the Electronic Health Record for Reimbursement
- The personal Health Record

Note: The time required to complete this program is 14 weeks.

After completion of this course, students may challenge the national certification examination from National Healthcare Association (NHA) to become Certified Medical Administrative Assistant (CMAA) and Certified Electronic Health Records Specialist (CEHRS)

Medical Billing and Coding Specialist Program

a) Medical Billing and Coding Specialist Program's is one of the fastest growing careers in the healthcare industry today! The course objective/purpose is to train students in various skills needed to perform complex coding and billing procedures. The program delivers the skills students need to solve insurance billing and coding problems. It details proper assignment of codes and the process to file claims for reimbursement. A Certified Billing and Coding Specialist's focus is on converting a medical procedure, diagnosis, or symptom into specific codes for submitting a claim for reimbursement
b) Complete Listing of Subjects (see below table)
c) Identifying Number: ***CIP CODE § 51.0713***
d) Title: Medical Billing and Coding
e) Contact Hours per Subject (see below table)
f) Total Contact Hours required for completion of the Program (see below table)
g) Length of Time required for completion of the Program: Seventeen (17) weeks classroom academic and lab time
h) Additional Requirements for completion: Final GPA of seventy percent (70%) or above
i) After completion of this program, the student is awarded: Certificate of Program Completion. At that time, the student will be eligible to take/challenge the National Examination from Healthcare Association (NHA), a fee of $105.00 for each examination to become a **Certified Medical Billing and Coding** (CBCS) **and/or Certified Electronic Health Records Specialist** (CEHRS). In addition, national examinations from numerous national certification entities are available from American Academy of Professional Coders (AAPC), American Health Information Association (AHIMA)
j) Work setting to find employment: Clinics, Hospitals, Medical Office Management, and Medical Insurance Office. Career opportunities, an increased pay scale, and increased subject matter expertise

Table 5: Medical Billing and Coding Specialist Program

Subject	Subject title	Total Hrs

		Lec – Lab – Ext – Total			
MBCS 101	Medical Terminology, Basic Human Anatomy & Physiology	60	36	00	96
MBCS 102	Reimbursement	30	18	00	48
MBCS 103	The ICD-10-CM, Using CPT, HCPCS, Modifiers and Inpatient Coding	72	60	00	132
MBCS 104	Electronic Health Records	34	30	00	64
MBCS 105	Career Development	02	02	00	04
Total Contact Hours Required for Completion		**198**	**146**	**00**	**344**

Program Description

The Medical Billing & Coding Profession **-** Medical billing and coding is one of the fastest-growing careers in the healthcare industry today! The need for professionals who understand how to code healthcare services and procedures for third-party insurance reimbursement is growing substantially. Physician practices, hospitals, pharmacies, long-term care facilities, chiropractic practices, physical therapy practices, and other healthcare providers all depend on medical billing and coding for insurance carrier reimbursement. The medical industry will have almost 50% more jobs available by 2018. A surplus of medical facilities will continue to hire candidates who specialize in medical billing and coding.

Lesson Checklist

Each lesson includes a prescribed checklist of activities for successful completion of the lesson. This includes lesson objectives, readings, and recommended assignments. Although assignments are optional, the instructor will grade and provide feedback on submitted assignments/homework.

Subject/Lesson Structure

The Medical Billing and Coding certification program is divided into eight main content modules. The textbook is *2015 Step-by-Step Medical Coding* by Carol J. Buck. Each module contains one or more lesson presentations to view. These lesson presentations are the "lectures" which, along with the textbook readings and resources, will help you learn the material. The lesson presentations aim to address a variety of learning styles and preferences using text, audio, video, etc. Each lesson contains at least one *Check Your Understanding* interactive self-assessment that will help you gauge your comprehension of that lesson's content. Classroom and online lectures, resources, and material are implemented with this program.

Many lessons include supplemental resources such as games, animations, videos, and interactive activities. Using these additional materials will deepen your understanding of the content. Each module has a Module test (the last Module concludes with a Final Exam for all students).

Course Overview

The Medical Billing & Coding Certification – The course offers the skills needed to perform complex coding and billing procedures. The course covers: Current Procedural Terminology (CPT) (Introduction, Guidelines, Evaluation and Management), specialty fields (such as surgery, radiology and laboratory), and

basic claims processes for insurance reimbursements. The program delivers the skills students need to solve insurance billing and coding problems. It details proper assignment of codes and the process to file claims for reimbursement. A Certified Billing and Coding Specialist's focus is on converting a medical procedure, diagnosis, or symptom into specific codes for submitting a claim for reimbursement.

This course covers the following key areas and topics:

- An overview of healthcare and the insurance industry
- The organization and use of the ICD-10-CM, CPT, and Healthcare Common Procedure Coding System (HCPCS) manuals to identify correct codes
- Detailed review and practice using the alphabetic index and tabular list of the ICD-10-CM
- Detailed review and practice coding examples from all sections within the CPT
- Basic claims processes for medical insurance and third-party reimbursements
- Completing common insurance forms, tracing delinquent claims, and appealing denied claims

Course Objectives

- Introduction to International Classification of Diseases, Clinical Modifications and Coding Guidelines
- Introduction to the organization and use of the ICD-10-CM and CPT manuals
- Basics of diagnostic and procedural coding
- The Health Insurance Claim Form (CMS 1500)
- HIPAA and Electronic Data Interchange (EDI)
- Review and practice coding Evaluation and Management (E&M) services
- Review and practice coding from anesthesia, surgery, radiology, medicine, and the pathology/laboratory
- Sections of the CPT
- CPT Modifiers, E and V Codes, and Late Effects
- Coding surgical procedures of the integumentary system
- Coding surgical and medical procedures of the cardiovascular system
- Coding procedures related to the female genital system and maternity care and delivery
- Coding for general surgery, radiology, pathology and laboratory services
- Coding for diagnostic and therapeutic services and the Level II National Codes
- Tracing delinquent claims and insurance problem solving
- Third-party reimbursement issues

Upon completion of this program, the student will be able:

- Define the International Classification of Diseases, Clinical Coding, and Classification Systems, including the basic human anatomy and medical terminology.
- Familiarize with insurance reimbursement, medical insurance forms, HIPAA, Compliance, Outpatient, and Reporting Guidelines, including Chapter-Specific Guidelines.
- Use the ICD-10-CM.
- Learn the Current Procedural Terminology (CPT) and level II National Code Healthcare Common Procedure Coding System (HCPCS) in any healthcare/medical department or setting.
- Assemble patient’s health information to ensure information is completed and accurate.

- Enter accurate codes for proper reimbursement for procedures, diagnosis, and treatment into computer.
- 7. Enter data, such as demographic characteristics, history and extent of disease, diagnostic procedures and treatment into computer.

Nursing Assistant

a) Objective and Purpose: To train students on practical and real-world experience in clinical settings.
b) Length of time required for completion of the program: 8.3 weeks classroom and 40 hrs. Clinical Externship.
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above.
d) Type of Certificate awarded: Certificate of programs completion from TTCCT. Students may take the examination for Texas Certified Nurse Aides under the jurisdiction of the Texas Department of Aging and Disability Services (DADS).
e) Nurse Assistant's duties and responsibilities may vary depending on the size and specialty of healthcare facilities. Specialize in varying areas such as: provide patients' personal hygiene by giving baths, backrubs, shaves, personal grooming, bedpans, urinals, provides for activities of daily living by assisting with serving meals, feeding patients, assisting patients or clients in ambulation, turning and positioning patients as well as proper body mechanics in turning and lifting patients, checking vital signs and weight, recording intake and output information. bed making, assisting in ambulation, positioning and turning, performing range of motion (ROM) exercise, providing basic patient care, maintains confidentiality for written, verbal and computerized information, reporting observations of the patient to supervisor and provide therapeutic communication.
f) Work Setting: Nursing Assistants may work in nursing homes, hospitals, adult day care centers, assisted living facilities hospitals, medical facilities, and home health or in nursing homes.

Table 6: Nursing Assistant

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
NA 1	Introduction to Nursing Assistant Profession	12	00	00	12
NA 2	Safety, Prevention, and Emergency Procedures	08	04	00	12
NA 3	Personal Care Skills	08	04	00	12
NA 4	Nutrition and Wellness	08	04	00	12
NA 5	Care of Cognitively Impaired Residents	10	02	00	12
NA 6	Clinical Rotation/Externship	00	00	40	40

Total Contact Hours Required for Completion	**46**	**14**	**40**	**100**

Program Description:

The program is designed to provide students with the knowledge and skills necessary to perform basic care services for a patient in an acute care setting or a resident in a long-term care setting. While rendering quality care to patients, the program also aims to inculcate nursing assistant students with good work ethics as they work under the supervision of a Registered Nurse (RN) or a Licensed Vocational Nurse (LVN). The curriculum includes classroom, hands on skills training/laboratory exercises, and supervised clinical hours, which may come in the form of internship or externships. The Nursing Assistant program will educate students in the duties and responsibilities to provide patients' personal hygiene by giving baths (as necessary), as well as helping with showers and baths, backrubs, shaves, personal grooming, bedpans, urinals. This also provides for activities of daily living by assisting with serving meals and feeding patients (as necessary). Students will also learn about assisting patients or clients in ambulation, turning, and positioning patients as well as proper body mechanics in turning and lifting patients. This maintains patient stability by checking vital signs and weight, recording intake, and output information. The clinical aspect is when the students will be working during shifts at a clinical site and mastering all the skills they were taught during lecture and skills training/laboratory exercises. Successful students of this program are eligible to challenge the Registry Exam for Nurse Aide through the Texas Department of Aging & Disability Services (TDADS).

Course Overview

Nursing Assistants hold an important place in the field of medicine because they assist the Registered Nurses and/or the Licensed Vocational Nurses in taking care of patients. The role played by Nursing Assistants is very critical during patient care as they keep direct contact with the residents or patients/clients and report any observations to RNs or LVNs. Their behavior and way of care impact the patient's health who's not only take care of the patients, but also calm down their family members/significant others by providing them emotional strength. Genuine concern for the ill and disabled patients and willingness to shoulder new responsibilities make these professionals the backbone of the nursing industry as they assist patients cope with the illness or overcome pain by providing diversional activities such as distractions, heat, massage or simply by being at patient's bedside. CNAs

are authorized to take care of patients of all ages. As the healthcare industry is set to grow tremendously, there is an incredibly high demand for Nurse Assistants having their variety of roles in the healthcare field. Opportunities in healthcare industry that require Nursing Assistants may be in nursing homes, hospitals, adult day care centers, and assisted living facilities. Opportunities to make a difference, ability to work in various facilities and areas, affordability, and stability are just some of the reasons why being a CNA makes such a great career choice.

Upon completion of this course, the student will be able to:

NA01 – Introduction to Nursing Assistant Profession

- Understand hospitals and long-term care centers
- Describe the members of the health team and nursing team
- Understanding the purpose of The Patient Care Partnership: Understanding Expectations, Rights and Responsibilities.

- Describe the purposes and requirements of the Omnibus Budget Reconciliation Act of 1987 (OBRA).
- Understand how to protect the person's rights
- Understand the reasons for denying, suspending or revoking a nursing assistant's certification, license or registration
- Demonstrate the scope of practice of nursing assistants and explain the Nursing Assistant's role in the nursing process
- Demonstrate the practices for good health, hygiene, professional appearance and rules for good communication and how to properly address the person
- Describe the qualities and traits of a nursing assistant to get a job
- Describe ethical behavior on the job and how to manage stress
- Describe the legal and ethical aspects of medical records and identify its commons parts
- Understand Maslow's Hierarchy of Needs
- Identify the basic structures of the cell and each body system
- Identify the developmental tasks of each age-group, social changes common in older adulthood
- Identify the gains and losses related to long-term care, the sexual changes and needs of older persons
- Demonstrate how to deal with sexually aggressive persons

NA02 - Safety, Prevention, and Emergency Procedures

- Describe accident risk factors
- Demonstrate how to correctly identify a person and its importance
- Demonstrate safety measures to prevent burns, poisoning and suffocation and how to handle hazardous substances
- Understand signs of choking and management
- Explain how to prevent equipment accidents, wheelchair and stretcher safety
- Identify natural human-made disasters and describe fire prevention measures what to do during fire
- Identify the causes and risk factors for falls
- Describe safety measures that prevent falls (use and purpose of bed side rails, wheel locks, transfer/gait belts)
- Demonstrate how to help the person who is falling
- Describe use and purpose of restraints and its alternatives
- Understand the legal aspect of restraint use
- Explain the signs and symptoms of infection and the chain of infection
- Describe the principles of medical asepsis
- Describe Standard Precautions and Transmission-Based Precautions
- Explain the Bloodborne Pathogen Standard
- Explain the purpose and rules of body mechanics and how ergonomics can prevent work-related injuries
- Identify comfort measures for moving and transferring patient/client and understand how to prevent work-related injuries when moving and transferring
- Perform the proper way of transferring and moving patient/client

NA03 – Personal Care Skills

- Demonstrate how to perform the person's room
- Describe how to control temperature, odors, noise and lighting for the person's comfort and to assist the nurse with promoting sleep and pain relief
- Demonstrate 4 ways to make beds
- Demonstrate how to properly handle linens
- Explain the purposes of a back massage
- Explain the importance of personal hygiene and demonstrate safely grooming measures
- Demonstrate safety measures when providing mouth care and safety measures in cleaning dentures
- Demonstrate the principles for bathing, safety measures for tub baths and showers
- Assists the patient/client in bathing
- Identify the normal from abnormal appearance of urine and observations to report to the nurse
- Understand the importance of urinary catheters and demonstrate how to care for patients/clients with urine catheters
- Identify the factors affecting bowel elimination
- Explain how to promote comfort and safety during defecation
- Understand the importance of enema
- Identify the rules for giving enema

NA04 – Nutrition and Wellness

- Understand the functions and sources of nutrients as well as the factors that affect eating and nutrition
- Understand the special diets and between-meal snacks
- Identify the signs, symptoms and precautions for aspiration and regurgitation
- Understand the importance of adequate fluid intake
- Demonstrate how to assist patient/client with special fluid orders and provide drinking water
- Demonstrate proper vital signs taking and identify the normal ranges of temperature, pulse rate, respiration and blood pressure for adult, child and infant
- Demonstrate how to prepare patient/client for weight and height measurement
- Explain how to prevent the complications from bed rest
- Describe the importance of support device and demonstrate in maintaining proper body alignment
- Demonstrate and assist patient/client range-of-motion exercises
- Demonstrate and assist patient in 4 walking aids
- Understand the importance of preventing skin ulcers and diabetic foot ulcers
- Understand the rules for applying dressings
- Identify the sites for pressure ulcers and its stages
- Identify the persons at risk for pressure ulcers, causes and risk factors of pressure ulcers and its preventions

NA05 – Care of Cognitively Impaired Residents

- Describe hypoxia and abnormal respirations and measures that promote oxygenation
- Understand how to safely assist patient/client with oxygen therapy

- Identify the common reactions to rehabilitation, rehabilitation programs and services
- Understand cancer and its treatment
- Understand common health problems due to aging such as Musculo-skeletal and nervous system disorders, hearing loss, eye disorders, cardiovascular, respiratory, digestive, endocrine, immune system, skin, urinary and reproductive disorders
- Explain the difference between mental health and mental illness. Understand the causes of mental health disorders
- Understand schizophrenia, bipolar disorder and depression, personality disorder, substance abuse and addiction.
- Identify the difference between delirium depression and dementia
- Identify the signs, symptoms and behaviors of Alzheimer's disease (AD) and effects of AD on the family
- Describe the rules of emergency care
- Demonstrate CPR and First Aid measures
- Describe palliative care and hospice care
- Describe and understand 5 Stages of dying
- Understand advance directives
- Explain how to assist with post-mortem care

NA06 – Clinical Externship

- Perform clinical rotation as assigned by the instructors and externship site supervisor
- Attend all clinical rotation schedules
- Be on time to all externship sites and follow their policies
- Use a soft and respectful tone when at Clinical site
- Do not treat a patient unless preceptor tells you to do so
- Do not argue with the preceptors
- Royal Blue scrubs and school ID badge must be always worn at the externship site
- Be considerate to others
- Get all your paperwork done before you leave

Note: The time required to complete this program is seven (7) weeks. Five (5) weeks Classroom/hands on procedures and lay two (2) weeks for required 40 clock hours externship. After completion of this course, students may take the examination given by the Texas Department of Aging and Disability Services (DADS) to become: Certified Nurse Assistant (CNA) Full Evaluation: Skills and Written students may register at: https://www.nursinglicensure.org/cna/texas- nursing-assistant.html#context/api/listings/prefilter

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Orthodontic Assistant

a) The Orthodontic Assistant Program's objective/purpose is to train students on the skills necessary for employment in any modern dental facility. This program will train students on assisting an orthodontist with procedures related to straightening the teeth, such as adjusting braces, making impressions for diagnostic models, taking photos, radiographs and helping with office administrative duties

b) Length of Time required for completion of the Program: Twelve (12) weeks classroom academic and practical.
c) Complete Listing of Subjects (see below table)
d) Identifying Number: CIP CODE § 51.0601
e) Additional Requirements for completion: Final GPA of seventy percent (70%) or above.
f) Type of Certificate awarded: Certificate of Program Completion from TTCCT. After completion of this program, student may take two Certification Examinations to be:
    a. Certified Orthodontic Assistant Examination (COA) for Traditional Candidate is $425 (includes the OA and ICE exams) and
    b. Orthodontic Assisting Exam only is $300. Please refer to www.danb.org for further details and updates.
g) Work Environment: The orthodontic assistant may work in general dental practice and specialized orthodontic practices and has close personal contact with patients.

Table 7: Orthodontic Assistant

Subject	**Subject title**	**Total Hrs Lec – Lab – Ext – Total**			
OA 101	Oral and Dental Anatomy and What is Orthodontics?	03	09	00	12
OA 102	The Orthodontic Appliance	03	09	00	12
OA 103	Archwire Selection, Placement, and Termination	03	09	00	12
OA 104	Headgears and Elastic	03	09	00	12
OA 105	Secondary Appliance	03	09	00	12
OA 106	Application of Orthodontic Appliance	03	09	00	12
OA 107	Removal and Retention	03	09	00	12
OA 108	Diagnostic Records	03	09	00	12
OA 109	Radiation and X-Ray Safety	03	09	00	12
OA 110	Orthodontic Models	03	09	00	12
OA 111	Patient Management	03	09	00	12
OA 112	Infection Control in Orthodontics and Professionalism in Orthodontics	03	09	00	12
Total Contact Hours Required for Completion		**36**	**109**	**00**	**144**

Program Description:

An orthodontic assistant is a specialized dental assistant who helps an orthodontist with patients wearing braces and orthodontic appliances for corrective procedures for alignment and spacing issues. The orthodontic assistant is deeply involved in patient care, from infection control and preparing instruments

to obtaining and maintaining patients' orthodontic records. This program will train students in assisting an orthodontist with procedures related to straightening the teeth, such as adjusting braces, making impressions for diagnostic models, taking photos, radiographs and helping with office administrative duties. Program coursework may include topics like:

Oral Anatomy and Physiology:

- Growth and Development of the Face
- Sterilization
- Diagnostic records including radiographs, models and photos
- Workplace safety
- Records management
- Fixed and removable orthodontic appliances
- Orthodontic instruments and materials
- Bracket placement and removal

Work Environment

The orthodontic assistant may work in general dental practice and specialized orthodontic practices and has close personal contact with patients. This demands a high level of maturity, integrity, honesty, ethics and responsibility. Good hand-eye coordination, visual memory and judgment of space are vital. An assistant sits for most work, often for long periods. On occasion, lifting and operating office machinery are required. Answering telephones and maintaining a patient record is not outside the scope of this position. An orthodontic assistant must be a team player, working closely with the orthodontist and other staff members.

Upon completion of this course, the student will be able familiarize:

- The oral and dental anatomy
- Tooth development and numbering
- Tooth surfaces, direction, and malocclusions
- Dentistry and Dental Specialties
- Types of treatment and stages of treatment
- Orthodontic Instrument and how the teeth move
- The basic orthodontic appliance parts and elastomeric (a.k.a. Elastics)
- Steel ligatures, intraoral auxiliaries, and non-traditional orthodontic appliances
- Placement, termination and Archwire selection
- Extra-oral auxiliaries – headgears and intra-oral auxiliaries
- Categories of secondary appliances, introduction to appliances fabrication, and types of appliances
- Separators or Spacers, orthodontics bands, and bonding or orthodontic appliances
- Removal of braces retention and post-treatment of procedures
- Introduction to diagnostic records, impressions, bite registration, orthodontic X-ray and photographic techniques, and digital records.
- Types of models such as: pouring, separation, trimming, and alternative to standard study models.

- Management of chair, patient, and body positioning. These includes the physical interaction with patients, checking appliance, patience instructions-oral and appliance care, charting, and patient communication
- What is infection control, sterilization and disinfection, and protecting our patients and ourselves?
- What to expect in the real world of orthodontics.

Patient Care Technician/Assisting (PCT/A)

a) Objective and Purpose: To train students in practical and real-world experience in patient care.
b) Length of time required for completion of the program: Eleven (11) weeks classroom.
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above.
d) Type of Certificate awarded: Certificate of programs completion from TTCCT. Students may take the national examination from the National Healthcare Association (NHA) to become a Certified Patient Care Technician (PCT), Certified EKG Technician, and Certified Phlebotomy Technician.
e) Patient Care Technician (PCT) duties may vary depending on the size and specialty of healthcare facilities, nursing homes or home health. Patient Care Technician may specialize in varying areas such as: Collect, report and document data including, but not limited to: Vital signs, height, weight, intake and output, oximetry and comfort level; Specimens for diagnostic study - urine, stool and sputum, phlebotomy essentials such as proper blood collection and fingerstick for blood glucose testing, performing standard 12-lead electrocardiography (EKGs), perform CPR—a skill that is valuable inside and outside of the facility, bed making, assisting in ambulation, positioning and turning, performing range of motion (ROM) exercise, providing basic patient care, maintains confidentiality for written, verbal and computerized information and provide therapeutic communication.
f) Work Setting: Patient Care Technician may work in hospitals, medical facilities, and home health or in nursing homes.

Table 8: Patient Care Technician/Assisting (PCT/A)

Subject	**Subject title**	**Total Hrs Lec – Lab – Ext – Total**			
PCT 1	Medical Terminology	06	06	00	12
PCT 2	Phlebotomy	28	20	00	48
PCT 3	Introduction to Patient Care/Infection Control/Legal Issues/ Human Anatomy and Physiology and Brief Description of Medical Condition, Disease and Disorder	12	12	00	24
PCT 4	Physical Assessment and Examination/Patient Positioning and Bed Mobility Techniques and Range of Motion (ROM)	12	12	00	24
PCT 5	Gait/ Assistive Devices/Orthosis/Prosthesis/Transfer Technique	12	12	00	24

PCT 6	Wound Care and Pressure Sores/ Wheelchair Management and Patient Care and Competency Skills	06	06	00	12
PCT 7	Special Topics Part 1-4	12	12	00	24
PCT 8	EKG	24	24	00	48
Total Contact Hours Required for Completion		**112**	**104**	**00**	**216**

Upon completion of this course, the student will be able to:

Course Overview

PCT01 - Medical Terminology Objectives

- To increase familiarity and comfort in using the common medical terms.
- To correctly spell, pronounce, define and identify words
- To properly use medical terms and abbreviations correctly in written assignments
- To provide the complete meaning of a medical abbreviation
- To correctly construct singular and plural form of medical terms using root words, affix, and suffixes

PCT02 - Introduction to Patient Care/Infection Control/Legal Issues/ Human Anatomy and Physiology and Brief Description of Medical Condition, Disease and Disorder

- Define and understand nosocomial infection
- Understand and demonstrate proper aseptic hand washing technique, donning and doffing personal protective equipment such as gloves, mask, gown, goggles
- Understand why Occupational Safety and Health Hazard Administration (OSHA) is important to workers/employees
- Understand employees' rights under Occupational Safety and Health Hazard Administration (OSHA)
- Identify potential routes of infection, mode of transmission of pathogens
- Define Human Anatomy and Physiology and identify the different levels of structural organization that make up the human body and understand their relationships
- Define and understand diseases and disorders and recognize the clinical manifestations

PCT03 - Physical Assessment and Examination/Patient Positioning and Bed Mobility Techniques and Range of motion

- Learn and demonstrate medical documentation such as how to write out notes in a patient's chart, along with other common formats
- Recognize opportunities for documentation
- Understand that medical record as protected and confidential information
- Establish realistic, measurable goals and objectives for documentation
- Understand vital signs as a baseline information in diagnosing diseases and disorders
- Define and demonstrate proper procedure in taking vital signs
- Demonstrate the equipment used to measure vital signs
- Identify normal ranges for vital signs

- Obtain baseline physical and mental data on the patient
- Obtain data that will help the nurse establish nursing diagnoses and plan patient care
- Identify the importance of correct patient positioning
- Demonstrate safe, comfortable, and appropriate positioning for clients in bed
- Differentiate between active and passive range of motion
- Demonstrate the ability to perform passive range-of-motion exercises, to assists patient in active range-of- motion exercises, and to perform combinations of passive and active range-of-motion exercises
- Understand purposes of proper positioning

PCT04 - Gait/ Assistive Devices/Orthosis/Prosthesis/Transfer Technique

- Demonstrate the ability to move a partially or totally immobile client safely from bed to chair and back; safely up in bed or to the side of the bed; to a wheeled stretcher; and back to bed; from wheelchair to chair or from chair back to wheelchair; from sitting to standing position or from standing to sitting position
- Demonstrate the ability to position a client/patient safely while transferring
- Demonstrate the ability to teach each of the crutch-walking gaits to a client. Practice each gait
- Demonstrate and practice going up and down stairs with crutches and a handrail
- Differentiate between client reminder devices for safety and for medical therapeutic reasons
- Describe the evaluation of fall risk and how this applies to nursing care and client safety
- Protect and support an injury
- Understand that orthopedic appliance or apparatus used to support, align, prevent, or correct deformities or to improve function of movable parts of the body
- Assists patient with prosthesis

PCT05 - Wound care and Pressure Sores/ Wheelchair Management and Patient Care and Competency Skills

- Identify phases of wound healing
- Describe the proper way to cleanse a wound
- Identify signs and symptoms of an infected wound
- Monitor status of skin around wound
- Monitor patient’s skin care practices, noting type of soap or other cleansing agents used, temperature of water and frequency of skin cleansing
- Monitor client's continence status and minimize exposure of skin impairment site and other areas to moisture from incontinence, perspiration, or wound drainage
- Identify and prevent the risks factors in developing pressure sores
- Identify the categories/stages of pressure ulcer
- Manage pressure sores
- Identify the common sites for development of pressure sores
- Management of patient with wheelchair
- Identify types of wheelchairs
- Competency Skills 1: Hand washing

- Competency Skills 2: For giving a Bed Bath & Back Rubs
- Competency Skills 3: Make an Occupied Bed
- Competency Skills 4: Assist with Range of Motion Exercises
- Competency Skills 5: Undressing and Dressing Patients
- Competency Skills 6: Take/Record Height and Weight
- Competency Skills 7: Assist with Applying & Removing Prosthesis/Orthosis Devices
- Competency Skills 8: Assisting with Applying Ace (Elastic) Bandages
- Competency Skills 9: Assisting with Applying Ted's (Elastic Stockings)
- Competency Skills 10: Assisting with Applying Binders
- Competency Skills 11: Collect Urine and Stool Specimen
- Competency Skills 12: Measure Urine Output
- Competency Skills 13: Test Urine Specimen
- Competency Skills 14: Perineal Care for Male and Female
- Competency Skills 15: Catheter care for Male and Female
- Competency Skills 16: Gait Belt and Transfer Belt Use: Ambulation
- Competency Skills 17: Lifting a Patient Using a Mechanical Lift (Hoyer's)
- Competency Skills 18: Positioning on Side (Turning Patient Towards You)
- Competency Skills 19: Change Non-Sterile (Clean) Dressing
- Competency Skills 20: Assisting Patients in Using Bed Pan
- Competency Skills 21: Feeding Patients
- Competency Skills 22: Foot Care
- Competency Skills 23: Denture Mouth
- Competency Skills 24: Mouth Care
- Competency Skills 25: Hand and Nail Care
- Competency Skills 26: Hot Compresses Application
- Competency Skills 27: Applying Cold Compresses
- Competency Skills 28: Care of a Non-Infected Decubitus Ulcer
- Competency Skills 29: Demonstrating A Skill to A Patient
- Competency Skills 30: Teaching A Task or Skill

PCT06 - Special Topics Part 1-4

- Special Topics Part I
  - Special Topic 1: Postural Imbalance
  - Special Topic 2: Confusion & Dementia
  - Special Topic 3: Nutrition & Meal
  - Special Topic 4: Measurement of Intake and Output
  - Special Topic 5: Ostomy and its Care
  - Special Topic 6: Draping Techniques
- Special Topics Part II
  - Special Topic 7: Aphasia & Types
  - Special Topic 8: CPR, AED & Abdominal Thrust
  - Special Topic 9: Patient Defense Mechanism

  - Special Topic 10: Admission Discharge & Transfer
  - Special Topic 11: Activities of Daily Living
- Special Topics Part III
  - Special Topic 12: Levels of Need
  - Special Topic 13: Aging and Its Changes
  - Special Topic 14: End of Life Care
  - Special Topic 15: Fall In Elderly
  - Special Topic 16: Relaxation Exercises
- Special Topics Part IV
  - Special Topic 17: Gait and Belt and Its Uses
  - Special Topic 18: Breathing Exercises
  - Special Topic 19: Professions in Therapeutic Services
  - Special Topic 20: Psychological Disorders
  - Special Topic 21: Personality Disorders
  - Special Topic 22: Death and Dying
  - Special Topic 23: Restraints & Incident Reports
  - Special Topic 24: Urine Specimen Collection
  - Special Topic 25: Stool & Sputum Specimen Collection
  - Special Topic 26: Safety Data Sheet (SDS)
  - Special Topic 27: Postmortem Care
  - Special Topic 28: Communication

PCT07 - EKG

- Administer ECG
- Identify and apply the correct lead placement
- Identify abnormal heart rhythms
- Analyze the pattern and frequency of the ECG recorded
- Safety features that include voltage protection for the patient and operator
- Identify artifacts from the tracing
- Measure a patient's heart conduction from the EKG tracing

PCT08 – Phlebotomy

- Should be able to present themselves in a reassuring, pleasant manner to helps allay fears and be able to explain procedure before blood drawing
- Check and review the requisition for testing requirements
- Determine types of consent
- Identify venipuncture site accessibility
- Verify patient compliance with testing requirements

PCT09 – Patient Care Technician Review and national Certification Exam

- To execute competency in providing quality patient care
- To pass the national certification exam

Note: *The time required to complete this program is 23 weeks.*

After completion of this course, students may challenge the national certification examination from National Healthcare Association (NHA) to become:

a) Certified EKG Technician (CET)
b) Certified Phlebotomy Technician (CPT)
c) Certified Patient Care Technician/Assistant (CPCT/A)

Pharmacy Technician

a) The Pharmacy Technician Program's objective/purpose is to train students on the skills that are important in assisting the pharmacist in the preparation and dispensing of medication; training in medication order processing, inventories, compounding, packaging, and use of a prescription balance; Health Insurance Portability and Accountability (HIPAA) privacy act and computers.
b) Length of time required for completion of the program: Twelve (12) weeks classroom academic and laboratory/clinical.
c) Additional Requirements for completion: Final GPA of seventy percent (70%) or above.
d) Type of Certificate awarded: Certificate of Program Completion from TTCCT. All successful graduates of this program are required to register with the Texas State Board of Pharmacy (TSBP) at www.tsbp.state.tx.us as a Pharmacy Technician Trainee. This application requires a criminal background test conducted by L1- Identity Solutions which is transmitted directly to the TSBP. After passing PTCB - accepted nationally recognized examination, graduates are given two years to change their Texas state registration status from **Trainee** to **Certified Pharmacy Technician** (CPhT). At this time, the **PTCB** and **National Healthcare Association (NHA)** are the only Texas approved exam to validate competency. *The ExCPT Exam is an alternative competency exam that is accepted by some states and entities for employability. Students are advised to consult the state Board of Pharmacy which has oversight authority if they intend to seek work in a state other than Texas to know what is required.* The student will be eligible to take/challenge the National Examination and a fee of $117.00 will be charged to become a **Certified Pharmacy Technician (ExCPT)** according to the NHA (optional).
e) Pharmacy technicians help licensed pharmacists dispense prescription medication, and work in retail pharmacies and hospitals. Pharmacy Technicians work under the supervision of licensed, board-certified pharmacists, who must review all prescriptions before they are given to patients. Pharmacy technicians working in hospitals and other medical facilities prepare a greater variety of medications, such as intravenous medications. They may make rounds in the hospital, giving medications to patients also.

Table 9: Pharmacy Technician

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
PhT 1	Introduction and Fundamentals of Pharmacology	06	00	00	06
PhT 2	Pharmacy Law and Ethics	06	03	00	09

PhT 3	Anatomy and Physiology	18	00	00	18
PhT 4	Medical & Pharmaceutical Terminology	01	01	00	02
PhT 5	Asepsis & Infection Control	04	04	00	08
PhT 6	Pharmacology I	07	09	00	16
PhT 7	Drug Classification	07	09	00	16
PhT 8	Pharmaceutical Compounding	03	05	00	08
PhT 9	Pharmacology II	04	12	00	16
PhT 10	Non-Prescription Drugs	04	08	00	12
PhT 11	Drug Information Research	02	05	00	07
PhT 12	Pharmacy Management	05	03	00	08
PhT 13	Computers in the Pharmacy	00	04	00	04
PhT 14	Career Development	05	04	00	09
PhT 15	Certification Exam Review	00	05	00	05
Total Contact Hours Required for Completion		**72**	**72**	**00**	**144**

Solar Energy Technician

a) Objective and Purpose: Solar photovoltaic (PV) installers, also known as *PV installers*, assemble, install, and maintain solar panel systems on rooftops or other structures.
b) Length of time required for completion of the program: Six (6) weeks classroom/laboratory.
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above.
d) Type of Certificate awarded: Certificate of programs completion from TTCCT.
e) Employment of solar photovoltaic (PV) installers is projected to grow 105 percent from 2016 to 2026, much faster than the average for all occupations. The continued expansion and adoption of solar panel installations will result in excellent job opportunities for qualified individuals, particularly those who complete photovoltaic training courses at a community college or technical school.
f) Work Setting: Most solar panel installations are done outdoors, but PV installers sometimes work in attics and crawl spaces to connect panels to the electric grid. Installers must also travel to jobsites.

Table 10: Solar Energy Technician

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
PV 1	PV FUNDAMENTALS	15	05	00	20
PV 2	PV SYSTEM DESIGN	15	05	00	20
PV 3	PV GRID TIE SYSTEMS	15	05	00	20
PV 4	PV STAND ALONE SYSTEMS	15	05	00	20
PV 5	PV CONSTRUCTION MANAGEMENT	15	05	00	20
PV 6	PV SYSTEM INTERCONNECTION	15	05	00	20
Total Contact Hours Required for Completion		**90**	**30**	**00**	**120**

Program Description:

A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing solar-powered energy systems. Includes instruction in solar energy principles, energy storage and transfer technologies, testing and inspection procedures, system maintenance procedures, and report preparation.

This six-week, six module programs will provide students with the skills and training necessary for entry level positions as Solar PV installers. Starting with the PV fundamentals, and a solid understanding of various components, system architectures, and applications for PV systems, Students will obtain in-depth knowledge PV Solar. Other topics include site analysis, system sizing, array configuration, and electricity

basics: electrical design characteristics such as wiring, overcurrent protection, and grounding; a detailed look at module and inverter specifications and characteristics; mounting methods for various roof structures and ground mounts; and an introduction to safety, construction management, commissioning and more. Upon completion of this course, students will be prepared to take part in one of the fastest growing industries in the world.

Course Overview

Employment of solar photovoltaic (PV) installers, often called *PV installers*, is projected to grow 105 percent from 2016 to 2026, much faster than the average for all occupations. The continued expansion and adoption of solar panel installation is expected to create new jobs. As the cost of PV panels and shingles continues to fall, more residential households are expected to take advantage of these systems, resulting in greater demand for the workers who install them. The increasing popularity of solar leasing plans—in which homeowners lease rather than purchase systems—should create additional demand, as they no longer bear the upfront costs of installation. The long-term outlook, however, is heavily dependent on government incentives, cost, and the continued improvement of PV panels. States and localities that provide incentives to reduce the cost of PV systems should experience greater demand for workers.

Common incentives include tax rebates, direct subsidies, renewable energy purchase mandates, and net metering. The course goes beyond residential PV installation with an emphasis on utility scale construction which makes up nearly 70% of industry and consists of the highest paying jobs.

Upon completion of this course, the student will be able to:

PV 101 – PV FUNDAMENTALS Objectives:

- Perform hazard analysis
- Identify job site hazards
- Implement ladder safety
- Implement fall protection plan
- Item fall protection plan
- Items execute electrical safety
- Item select personal protective (PPE)
- Identify common types of PV system applications for both stand-alone and utility interactive systems with and without energy storage.
- Understand the fundamentals of electric utility system operations, including generation, transmission, distribution and typical electrical service supplies to buildings and facilities.
- List the advantages and disadvantages of PV systems compared to alternative electricity generation sources.
- Define basic terminology, including solar radiation, solar irradiance, solar irradiation, solar insolation, solar constant, air mass, ecliptic plane, equatorial plane, pyranometer, solar declination, solstice, equinox, solar time, solar altitude angle, solar azimuth angle, solar window, array tilt angle, array azimuth angle, and solar incidence angle.
- Differentiate between solar irradiance (power), solar irradiation (energy), and understand the meaning of the terms peak sun, peak sun hours, and insolation
- Understand the consequences of array shading and best practices for minimizing shading and preserving array output.
- Create an energy audit
- Identify all the PV technologies
- Identify all the components of a PV Solar System
- Learn PV system configuration
- Identify the five key electrical output parameters for PV modules using manufacturer's' literature (Voc, Isc, Vmp, Imp and Pmp), and label these points on a current-voltage (I-V) curve.
- Define various performance rating and measurement conditions for PV modules and arrays, including STC, SOC, NOCT, and PTC.
- Describe the features and benefits of Grid Tied and Stand-Alone System

PV 102 – PV System Design Performance Objectives:

- Understand the meaning of basic electrical parameters including electrical charge, current, voltage, power and resistance, and relate these parameters to their hydraulic analogies (volume, flow, pressure, hydraulic power and friction).

- Describe the function and purpose of common electrical system components, including conductors, conduits/raceways and enclosures, overcurrent devices, diodes and rectifiers, switchgear, transformers, terminals and connectors, grounding equipment, resistors, inductors, capacitors, etc.
- Identify basic electrical test equipment and its purpose, including voltmeters, ammeters, ohmmeters and watt-hour meters.
- Demonstrate the ability to apply Ohm's Law in analyzing simple electrical circuits, and to calculate voltage, current, resistance or power given any other two parameters
- Identify basic properties of electrical conductors including materials, size, voltage ratings and insulation coverings and understand how conditions of use, such as location, other conductors in the same conduit/raceway, terminations, temperature and other factors affect their ampacity, resistance and corresponding overcurrent protection requirements.
- Identify customer needs, concerns, and expectations
- Identify factors to consider in a preliminary assessment, including the local solar resource, environmental conditions, and building code and utility interconnection requirements
- Explain factors considered in identifying appropriate array locations
- Describe methods for conducting a shading analysis
- Perform a site analysis
- Beginning with PV module DC nameplate output, list the de-rating factors and other system losses, and their typical values, and calculate the resulting effect on AC power and energy production, using simplified calculations, and online software tools including PVWATTS
- Understand the importance of nameplate specifications on PV modules, inverters and other equipment on determining allowable system voltage limits, and for the selection and sizing of conductors, overcurrent protection devices, disconnect means, wiring methods and in establishing appropriate and safe interfaces with other equipment and electrical systems.
- For a specified PV module and inverter in a simple utility-interactive system, determine the maximum and minimum number of modules that may be used in source circuits and the total number of source circuits that may be used with a specified inverter, depending upon the expected range of operating temperatures, the inverter voltage windows for array maximum power point manufactures' online string sizing software tools.
- Design a roof top PV solar system
- Design a ground mount PV solar system
- Perform PV system sizing calculations for major components
- Perform system sizing

PV 103 - Solar Grid Tie Systems Performance Objectives:

- Identify the advantages and disadvantages of a grid tied system
- Identify all the equipment and components of a grid tied system
- Identify the common ways PV arrays are mechanically secured and installed on the ground, to building rooftops or other structures, including rack mounts, ballasted systems, pole mounts, integral, direct and stand-off roof mounts, sun tracking mounts and for other building-integrated applications

- Understand the requirements for roofing systems expertise and identify the preferred structural attachments and weather sealing methods for PV arrays affixed to different types of roof compositions and coverings.
- Compare and contrast the features and benefits of different PV array mounting systems and practices, including their design and materials, standardization and appearance, applications and installation requirements, thermal and energy performance, safety and reliability, accessibility and maintenance, costs and other factors.
- Perform the installation of a Roof Top Grid Tied system
- Describe the purpose and organization of the National Electrical Code book

PV 104 – Stand Alone Systems Performance Objectives:

- Describe the advantages and disadvantages of Stand-Alone systems
- Identify all the equipment and components of a Stand-Alone system
- Understand the basic principles, rationale and strategies for sizing stand-alone
- PV systems versus utility-interactive PV systems.
- Given a stand-alone application with a defined electrical load and available solar energy resource, along with PV module specifications, size and configure the PV array, battery subsystem, and other equipment as required, to meet the electrical load during the critical design period
- Perform the installation a Stand-Alone System
- Identify the major battery components and their functions
- Differentiate between the basic types and classifications of batteries
- Understand the operation of batteries and their discharging and charging characteristics
- Understand major principles and considerations for both designing battery banks and installation
- Identify the principal functions and features of charge controllers
- Identify requirements for charge controller applications and installations
- Demonstrate the knowledge to size a PV system for a Stand-Alone system

PV 105 – PV Construction Project Management: Performance Objectives:

- Perform a preliminary site assessment and survey
- Prepare a proposal
- Plan an installation
- Identify the roles and responsibilities of the Project Management team
- Describe preplanning
- Describe the CPM construction management process
- Understand Best Construction Management practice for solar installations both small scale and large.
- Identify recommended safety practices
- Identify best PV installation practices

PV 106 - PV System Interconnection, Code, Compliance, Commission, Testing, and Inspections Performance Objectives:

- Identify Interconnection code requirements

- Demonstrate knowledge of key articles of the National Electrical Code, including Article 690, Solar Photovoltaic Systems.
- Describe typical maintenance requirements for PV arrays and other system components, including inverters and batteries, etc.
- Describe the commissioning process for a PV system (small and large)
- Describe Interconnection compliance
- Identify the most common types of reliability failures in PV systems and their causes due to the equipment, quality of installation and other factors.
- Identify all testing required system Interconnection
- Identify all Inspections required for interconnection
- Describe the purpose of SCADA and DAS systems
- Understand basic troubleshooting principles and progression, including recognizing a problem, observing the symptoms, diagnosing the cause and taking corrective actions leading from the system, subsystem to the component level.
- Identify typical local jurisdiction forms required for interconnection of PV Systems
- Understand operations and maintenance of a PV solar system

Solar Maintenance Technician Program

- **Solar Maintenance Technician:** Routine inspections, troubleshooting, and repair of solar systems.
- **Utility-Scale PV Technician:** Maintenance and operation of large-scale solar farms.
- **Operations and Maintenance (O&M) Technician:** Day-to-day management of solar power plants.
- **Battery Energy Storage Technician (BESS Technician):** Installation and maintenance of battery storage systems.
- **SCADA Systems Technician:** Monitoring and controlling utility-scale PV systems.
- **Solar Field Service Technician:** On-site services for solar installations.
- **Safety Coordinator:** Ensuring compliance with safety regulations.
- **Environmental Compliance Specialist:** Adhering to environmental regulations.

Table 11: Solar Maintenance Technician Program

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
SMT 101	Fundamentals of Photovoltaics and Electrical Basics	32	08	00	40
SMT 102	Safety Protocols and Hazard Management	16	04	00	20
SMT 103	Utility-Scale PV System Design and Compliance	16	04	00	20
SMT 104	Advanced Electrical Integration and System Components for Utility-Scale PV Plants	32	08	00	40

SMT 105	Utility-Scale PV System Components and SCADA Systems	32	08	00	40
SMT 106	Battery Energy Storage Systems (BESS) and Mechanical Integration	16	04	00	20
SMT 107	SCADA and Advanced System Operations	16	04	00	20
SMT 108	Operations & Maintenance for Utility-Scale Solar Plants	16	04	00	20
SMT 109	Regulatory Compliance for Utility-Scale PV Plants	16	04	00	20
SMT 110	Soft Skills Training	16	04	00	20
SMT 111	Storm Water Pollution Prevention Plan (SWPPP)	08	12	00	20
SMT 112	Final Review, Capstone & Exam	08	12	00	20
Total Contact Hours Required for Completion		**232**	**68**	**00**	**300**

Program Description:

The program provides hands-on, industry-relevant training in solar O&M, covering essential topics like electrical fundamentals, safety protocols, photovoltaic design, battery energy storage, SCADA operations, and leadership training. Graduates will be equipped for careers in solar O&M, battery storage, and grid integration.

Course Overview

The 15-Week Comprehensive Solar Maintenance Technician Program is designed to provide hands-on, industry-relevant training in utility-scale solar operations and maintenance (O&M). Developed in collaboration with Leeward Renewable Energy, this program covers electrical fundamentals, safety protocols, photovoltaic (PV) system design, battery energy storage systems (BESS), SCADA operations, regulatory compliance, and industry-specific leadership training. Graduates will be well-prepared for careers in solar O&M, battery storage, and grid integration, meeting the growing demand for skilled technicians in the renewable energy sector.

Upon completion of this course, the student will be able to:

SMT 101: Fundamentals of Photovoltaics and Electrical Basics

This course introduces students to the core principles of photovoltaic (PV) energy and electrical fundamentals. Students will learn about electromagnetism, basic electrical theory, solar irradiance, and essential PV system components. The curriculum includes hands-on labs measuring solar irradiance and learning the use of electrical testing tools.

Learning Objectives:

- Understand the fundamentals of photovoltaic energy conversion.
- Explain the concepts of current, voltage, resistance, and power.
- Apply Ohm's Law to analyze basic electrical circuits.
- Identify and describe the major components of a PV system.

- Measure solar irradiance and analyze its impact on energy production.
- Demonstrate the safe use of basic electrical testing tools such as multimeters and insulation testers.

SMT 102: Safety Protocols and Hazard Management

This module covers critical OSHA and NFPA 70E safety regulations, including lockout/tagout (LOTO), arc flash safety, ladder safety, emergency action plans (EAP), and confined space hazards. Students will participate in hands-on safety drills, hazard assessments, and a group arc flash simulation project.

Learning Objectives:

- Explain OSHA and NFPA 70E safety requirements for solar installations.
- Demonstrate proper PPE use and fall protection.
- Perform lockout/tagout (LOTO) procedures for electrical work.
- Conduct a Job Hazard Analysis (JHA) and complete safety documentation.
- Identify confined space hazards and crane safety protocols.
- Implement emergency response procedures for workplace accidents.

SMT 103: Utility-Scale PV System Design and Compliance

This subject focuses on PV system design for large-scale solar farms, including the National Electric Code (NEC), wire sizing, voltage drop calculations, and grounding requirements. Students will learn how to design compliant wiring systems and troubleshoot potential issues.

Learning Objectives:

- Explain NEC regulations for utility-scale solar projects.
- Calculate maximum and minimum string sizes for PV arrays.
- Perform wire sizing and voltage drop calculations.
- Understand grounding and bonding requirements for large-scale solar.
- Interpret solar schematics and one-line diagrams.
- Apply industry standards to ensure regulatory compliance.

SMT 104: Advanced Electrical Integration and System Components for Utility-Scale PV Plants

This module dives into high-voltage electrical integration, covering overcurrent protection, transformers, combiner boxes, and disconnects. Students will learn how to troubleshoot and maintain Sungrow inverters, battery storage systems, and PV wiring infrastructure.

Learning Objectives:

- Install and maintain transformers, combiner boxes, and overcurrent protection devices (OCPDs).
- Troubleshoot grounding faults and electrical failures.
- Perform advanced wire sizing calculations for high-voltage applications.
- Properly crimp and terminate MC4 connectors.
- Conduct electrical safety inspections on live PV systems.
- Identify and resolve power fluctuations and inverter shutdowns.

SMT 105: Utility-Scale PV System Components and SCADA Systems

This subject covers the major components of a solar power plant, including SCADA systems, meteorological stations, switchgear, and grid interconnection. Students will work with real-time monitoring systems and predictive maintenance tools.

Learning Objectives:

- Explain the role of SCADA in solar energy monitoring.
- Install and configure SCADA data collection systems.
- Analyze meteorological data for system performance optimization.
- Troubleshoot switchgear, substations, and transmission lines.
- Identify cybersecurity risks in solar monitoring networks.
- Perform preventive maintenance on SCADA components.

SMT 106: Battery Energy Storage Systems (BESS) and Mechanical Integration

With the expansion of grid-scale battery storage, this subject focuses on battery anatomy, charge controllers, inverter integration, and system troubleshooting. Students will learn safe handling, installation, and maintenance of lithium-ion storage systems.

Learning Objectives:

- Explain the role of battery energy storage in solar projects.
- Install and maintain battery storage systems safely.
- Troubleshoot BESS components, including charge controllers and inverters.
- Integrate BESS with solar arrays and grid networks.
- Perform hands-on battery installation and system diagnostics.
- Assess the economic and environmental benefits of solar storage solutions.

SMT 107: SCADA and Advanced System Operations

Students will explore SCADA software, performance analytics, and cybersecurity. They will practice real-time fault detection, predictive maintenance strategies, and system optimizations for solar energy plants.

Learning Objectives:

- Configure SCADA systems for predictive maintenance.
- Identify system failures using real-time monitoring tools.
- Implement data analytics for performance optimization.
- Understand risk management strategies for cybersecurity.
- Troubleshoot data anomalies in solar monitoring systems.
- Develop operational plans for large-scale PV plants.

SMT 108: Operations and Maintenance for Utility-Scale Solar Plants

This module covers preventive and corrective maintenance techniques for solar O&M. Students will practice diagnosing system faults, optimizing efficiency, and performing routine inspections.

Learning Objectives:

- Develop operations and maintenance (O&M) plan for PV systems.
- Conduct preventive maintenance on inverters, switchgear, and transformers.
- Perform fault analysis and corrective maintenance procedures.
- Optimize system performance for maximum energy output.
- Assess long-term reliability and maintenance scheduling.
- Ensure regulatory compliance in O&M operations.

SMT 109: Regulatory Compliance for Utility-Scale PV Plants

Students will study solar permitting, grid interconnection policies, and environmental regulations, including Stormwater Pollution Prevention Plans (SWPPP).

Learning Objectives:

- Understand the permitting and compliance process for utility-scale PV projects.
- Explain environmental regulations affecting solar plants.
- Develop and implement a SWPPP for solar installations.
- Monitor system compliance with grid connection requirements.
- Identify sustainability best practices in solar energy.
- Complete a compliance audit for a hypothetical PV plant.

SMT 110: Soft Skills Training

Technical skills are only part of a successful career. This module focuses on **teamwork, leadership, professional communication, and career development**.

Learning Objectives:

- Develop strong workplace communication and teamwork skills.
- Apply conflict resolution strategies in professional settings.
- Understand leadership roles in the renewable energy industry.
- Create a professional resume and cover letter.
- Participate in mock job interviews and career workshops.
- Engage with industry leaders through guest speaker sessions.

SMT 111: Stormwater Pollution Prevention Plan (SWPPP)

Students will learn stormwater management regulations, best practices, and compliance measures for solar construction sites.

Learning Objectives:

- Identify SWPPP requirements for solar plants.
- Develop stormwater management strategies.
- Implement best management practices (BMPs) for environmental compliance.
- Conduct SWPPP site inspections.
- Evaluate case studies of SWPPP implementation.

SMT 112: Final Review and Assessment

This final week consists of comprehensive reviews, practical skills assessments, and capstone projects.

Learning Objectives:

- Demonstrate hands-on troubleshooting and system diagnostics.
- Apply PV system design principles to a capstone project.
- Complete a written and practical final exam.
- Present a maintenance plan for a hypothetical solar plant.

Construction Electrician Program

a) Objective and Purpose: Provide training and education to students introducing them to the electrical trade.
b) Length of time required for completion of the program: Twenty-four (24.5) weeks classroom/laboratory.
c) Additional requirements for completion: Final Grade Point Average (GPA) of seventy (70%) or above.
d) Type of Certificate awarded: Certificate of programs completion from TTCCT.
e) Employment of electrical installers nationwide is estimated to need an additional 78,000 workers.
f) This course will be conducted entirely on-site, with all instruction taking place at our facility. Students will engage directly with instructors in a classroom setting, ensuring comprehensive hands-on learning and immediate support.

Table 12: Construction Electrician Program

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
ELEC 101	ELECTRICAL FUNDAMENTALS	60	20	00	80
ELEC 102	RESIDENTIAL WIRING	45	25	00	70
ELEC 103	COMMERCIAL WIRING	90	50	00	140
ELEC 104	SPECIALTY LOCATIONS	90	40	00	130
ELEC 105	MANAGEMENT & PRODUCTIVITY	45	25	00	70
Total Contact Hours Required for Completion		**330**	**160**	**00**	**490**

Program Description:

The Training Center of Central Texas' 2H Electrician Training Program is a twenty-two-week, five module courses designed to provide students with the training and skills necessary for careers in the

electrical field. The course begins with an introduction to the NEC and electrical theory fundamentals, then goes through construction practices, safety, and jobsite conditions. The Construction Electrician Certification will focus on residential, commercial, and industrial trade practices, as well as the topics of grounding, bonding, complex switching and controls, motors, transformers and construction management. There are scheduled lab days which will demonstrate installations and develop the students' skills with installations.

Certificate holders will be able to immediately join a workforce which is projected to require an additional 78,000 skilled workers and will be confident and competent to contribute to planning and execution of an electrical construction project. Upon graduation from the course, the student will be able to be a productive and skilled member of the electrical trade in any aspect of the trade which appeals to them.

Course Overview

The course begins with an introduction to the NEC and electrical theory fundamentals, then goes into construction practices, safety, and jobsite conditions. The course will focus on residential, commercial, and industrial trade practices, as well as the topics of grounding, bonding, complex switching and controls, motors, transformers, and construction management. There are scheduled lab days which will demonstrate installations and develop students' skills with installations.

Upon completion of this course, the student will be able to:

ELECT 101 – ELECTRICAL FUNDAMENTALS Objectives:

- Use of Ohm's Law to mathematically find variable in electric equations
- Demonstrate ability to use the NEC codebook to reference regulations
- Demonstrate knowledge of material types and requirements
- Demonstrate knowledge of multimeters and tools
- Learn AC & DC circuit fundamentals

ELEC 102 – RESIDENTIAL WIRING Objectives:

- Demonstrate residential specific knowledge of the NEC
- Demonstrate knowledge of grounding and bonding of a residential system
- Demonstrate the ability to wire a residence
- Identify materials specific to the residential sector
- Proper use of AFCI and GFCI protection

ELEC 103 – COMMERCIAL WIRING Objectives:

- Demonstrate ability to run conduit
- Demonstrate ability to pull and terminate wires
- Demonstrate ability to read blueprints
- Understand safe underground installation procedures

ELEC 104 – SPECIALITY LOCATIONS & MOTORS Objectives:

- Understand how to classify hazardous locations
- Learn differences between installation standards
- Demonstrate ability to make terminations on motors

- Demonstrate knowledge of complex switching
- Learn how to use PNID drawings
- Be able to identify and install different types of light fixtures

ELEC 105 –MANAGEMENT & PRODUCTIVITY:

- Demonstrate ability to layout a set of blueprints
- Understand the importance of managing material and manpower
- Understand the keywords and schedules of the prime contractor
- Demonstrate ability to file RFIs
- Understand inspections and punch lists

Comprehensive Dental Assisting

a) The Dental Assistant Program's objective/purpose is to train students in the skills necessary for employment in any modern dental facility. A qualified Dental Assistant can assume many activities that do not require the professional skills and judgment of the dentist, although the responsibilities assigned as a Dental Assistant are limited.
b) Length of Time required for completion of the Program: Thirty (30) weeks classroom academic time and 120 hours externship.
c) Additional Requirements for completion: Final GPA of seventy percent (70%) or above.
d) Type of Certificate awarded: Certificate of Program Completion from TTCCT. All successful graduates may apply for the State licensure for Registered Dental Assistant at the Texas State Board of Dental Examiners found at www.tsbde.state.tx.us.

Admission Requirements:

a) Minimum Age: Eighteen (18) years old
b) Specific Entrance Requirements: All documents written in foreign languages other than English must be translated to English, notarized, and approved by the school personnel prior to registration.
    1) Two valid forms of Government Issued Identification (one must have photo)
    2) Educational requirement: proof of General Educational Development/Diploma (GED), High School Transcript/Diploma or College Transcript/Diploma
    3) Pass Five (5) Panel Urine Drug Screen (administered on site; and
    4) Pass a background check (administered on site) through Texas Department of Public Safety (DPS) Civil or criminal offenses may bar an individual from employment as an allied health career professional. In addition, A person enrolled or planning to enroll in this educational program that prepares the person for licensure as a dental assistant who has reason to believe that he or she may be ineligible for licensure due to a conviction or deferred adjudication for a felony or a misdemeanor offense may apply for a criminal history evaluation in accordance with TSBDE

5) Admissions interview: In order to ensure a baseline of student commitment, completion and positive placement outcomes for careers in dental assisting, students may be subject to an admissions interview.

Table 13: Comprehensive Dental Assisting

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
DA 101	The Dental Assisting Profession	10	10	00	20
DA 102	Sciences in Dentistry	14	06	00	20
DA 103	Oral Health Preservation and the Prevention of Dental Disease	15	25	00	40
DA 104	Infection Prevention in Dentistry	10	30	00	40
DA 105	Occupational Health and Safety	10	10	00	20
DA 106	Patient Information and Assessment	08	12	00	20
DA 107	Foundation of Clinical Dentistry	20	40	00	60
DA 108	Radiographic Imaging	20	40	00	60
DA 109	Dental Materials	10	30	00	40
DA 110	Assisting in Comprehensive Dental Care	40	80	00	120
DA 111	Dental Administration and Communication Skills	10	30	00	40
DA 112	Externship	00	00	120	120
Total Contact Hours Required for Completion		**167**	**313**	**120**	**600**

Program Description

The Comprehensive Dental Assistant Program is a complete program that is designed to provide emphasis on performing clinical duties in dental assisting specifically chairside assisting which includes patient processing, four-handed dentistry, and dental laboratory skills. It will provide the background, principles, and techniques necessary to become an educationally qualified and competent dental assistant. This also includes performing administrative duties such as: scheduling appointments, maintaining dental records, billing, and coding information using a dental software program called Dentrix for insurance purposes. The graduate student will be eligible to take the state board exam to become Registered Dental Assistant (RDA) to be able to work at the state and other states that recognizes the Texas State Board of Dental Examiners (TSBDE). After securing license to practice as RDA, graduates can work in a dental office and may also teach a dental assisting program after securing extensive dental experience for at least five (5) years.

Comprehensive Medical Billing & Coding Specialist

Table 14: Comprehensive Medical Billing & Coding Specialist

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
MBC-MAA 101	Introduction to Medical Assisting	20	00	00	20
MBC-MAA 102	Ambulatory Care Administration	10	10	00	20
MBC-MAA 103	Medical Office Administrative Functions	08	04	00	12
MBC-MAA 104	Assisting with Medical Specialties & Career Development	08	08	00	16
MBC-HER 101	Electronic Health Records	20	20	00	40
CMBC 101	Medical Terminology and Anatomy	80	00	00	80
CMBC 102	ICD-10, CPT, HCPCS Coding	70	70	00	140
CMBC 103	Insurance and Reimbursement	48	40	00	88
CMBC 104	Review and Career Development	06	06	00	12
Total Contact Hours Required for Completion		**270**	**158**	**00**	**428**

Program Description:

Course Overview

Substation Technician Program

Table 15: Substation Technician Program

Subject	Subject title	Total Hrs Lec – Lab – Ext – Total			
STP-101	Introduction to Power Delivery	80	00	00	80
STP-102	Substations – Overview and Equipment	120	00	00	120
STP-103	Substations Design and Construction	60	60	00	120
STP-104	Substation System Operations	30	30	00	60
STP-105	Management and productivity	60	00	00	60

Total Contact Hours Required for Completion	**350**	**90**	**00**	**440**

Program Description:

The Substation Technician training program is a 440 hour, 22-week (assuming 20 hour/week), 5 module courses designed to provide students with the training and skills necessary for careers in the electrical T&D field.

Certificate holders will be able to immediately join a workforce which is projected to require an additional 65,000 skilled workers (*source: Bureau of Labor Statistics*) and will be confident and competent in contributing to planning and execution of an electrical construction project. Upon graduation from the course, students will be able to be productive and skilled members of the electrical T&D.

Course Overview

This course begins with an introduction to the power delivery systems, proceeds through safety and NESC (National Electrical Safety Code) for all practical applications and steps. It continues with design and construction practices that go deeper into the safety specifics for jobsite conditions. The Substation Technician program will concentrate on practical impacts of substation construction and systems operations as well as best for the trade practices. This course will touch on system operations and maintenance necessary for uninterrupted power supply. There are scheduled lab days which will be used for practical hands-on demonstrations for installations and develop students' skills with installations.

Comprehensive Patient Care Technician/Assistant Program

a) **Objective and Purpose:** To train students in essential skills and competencies needed to become proficient Patient Care Technicians, capable of providing high-quality care in various healthcare settings.

b) **Length of Time Required for Completion of the Program:** Classroom Academic = 254 clock hours, Laboratory = 158 clock hours. TOTAL = 412 clock hours.

c) **Additional Requirements for Completion:** Final Grade Point Average (GPA) of seventy (70%) or above.

d) **Type of Certificate Awarded:** Certificate of program completion from TTCCT. Students may challenge national examinations to become Certified Phlebotomy Technician (CPT), Certified EKG Technician (CET), and other relevant certifications.

e) **Occupation Classification:** Patient Care Technicians assist in delivering patient care by performing clinical tasks such as taking vital signs, assisting with daily living activities, and ensuring patient safety. They work under the supervision of healthcare professionals and help maintain a clean and safe environment.

f) **Work Setting:** Patient Care Technicians may work in hospitals, clinics, long-term care facilities, and home health settings.

Table 16: Comprehensive Patient Care Technician/Assistant Program

Subject	Subject title	Total Hrs

		Lec – Lab – Ext – Total			
CPCT-101	Phlebotomy	48	24	00	72
CPCT-102	Medical terminology	16	12	00	28
CPCT-103	Electrocardiography	60	24	00	84
CPCT-104	Introduction to Healthcare/Role of Patient Care Technician/Professionalism & Work Ethics/Communication/Understanding the Patient & Patient Rights/Ethics & Laws/ Body Structure & Function/Growth & Development/Pain Management, Comfort, Rest and Sleep	24	04	00	28
CPCT-105	Asepsis and Infection Control/Workplace Safety and Body Mechanics/Patient Safety/Moving, Positioning and Preventing Falls/Basic Emergency Care/Assisting with the Physical Examination/Vital Signs taking	16	12	00	28
CPCT-106	Admissions & Discharge/Bedmaking & Hygiene/Assisting with Grooming/Assisting with Nutrition & Fluids/Assisting with Urinary Elimination/Assisting with Bowel Elimination/Oxygen Needs	08	16	00	24
CPCT-107	Care of the Surgical Patient/Heat & Cold Applications/Care of Wounds and Pressure Ulcers/Rehabilitative and Restorative Care	12	04	00	16
CPCT-108	Care of Women and Children/Caring for Older Adults/Caring for Patients with Mental Health Needs/Caring for Patients with Chronic Conditions/End-of-Life Care	08	04	00	12
CPCT-109	Physical Therapy Aide	50	50	00	100
CPCT-110	Essential Soft Skills Certificate	12	08	00	20
Total Contact Hours Required for Completion		**254**	**158**	**00**	**412**

Program Description

The Patient Care Technician program provides comprehensive training in both clinical and administrative skills necessary for effective patient care. Students will learn to perform vital tasks including blood collection, basic life support, infection control procedures, and patient assistance during daily activities. The curriculum emphasizes hands-on experience to ensure students are well-prepared for real-world scenarios in healthcare settings.

Course Overview

The role of a Patient Care Technician is vital in today's healthcare landscape, contributing significantly to patient care and support. This program equips students with a diverse skill set, including phlebotomy,

electrocardiography, and knowledge of medical terminology. With an emphasis on professional ethics and patient rights, students will be prepared to excel in various healthcare environments. According to the Bureau of Labor Statistics, the demand for patient care technicians is expected to grow rapidly, providing numerous job opportunities for graduates.

Residential Wiremen Program

a) Program objective: To educate and upskill students on the installation of systems that distribute power in homes including but not limited to installation of general lighting branch circuits as well as the standard power distribution systems to lights and receptacles throughout the home, small appliance, laundry, dishwasher and bathroom, electric range, countertop cook unit and wall-mounted oven, electric clothes dryer, water pump, electric water heater and air conditioning, energy management systems, security systems and fire alarms.
b) Work setting to find employment: A Residential Wireman works under the supervision of a Master Electrician, on behalf of an electrical contractor or employing governmental entity performing electrical installations in single-family or multi-family dwellings not exceeding four stories.
c) Length of time required for completion of the Program: Eight (8) weeks classroom and hands-on procedural skills training.
d) Additional Requirements for completion: Final Grade Point Average (GPA) of seventy percent (70%) or above and completion of 160 contact hours.
e) Type of Certificate awarded: Certificate of Program Completion from The Training Center of Central Texas.

Table 17: Residential Wiremen Program

Subject	Subject title	Total Hrs Lec –	Lab –	Ext –	Total
RW 101	Safety and Theory	20	00	00	20
RW 102	Service Entrances & Equipment and Residential Electrical System Rough-In	10	10	00	20
RW 103	Residential Electrical System Rough-In	20	30	00	50
RW 104	Residential Electrical System Trim-Out	20	30	00	50
RW 105	Maintaining and Troubleshooting a Residential Electrical Wiring System	10	10	00	20
Total Contact Hours Required for Completion		**80**	**80**	**00**	**160**

Program Description

The Residential Wiremen Training Program is a 160 hour, 8-week course designed to provide students with more advanced theoretical knowledge and basic “hands-on” skills needed to achieve job proficiency. In addition to the topics such as National Electrical Code (NEC), sizing electrical boxes, circuit conductors,

sizing fuses or circuits breakers, the program mainly focuses on "hands-on" wiring skills which includes but not limited to proper use of hand and power tools, splicing wires together properly, attaching electrical boxes to building framing members, fishing cable in an existing wall and installing an overhead service entrance. The training also includes coverage of green wiring practices.

Course Overview

Residential wiremen install and distribute electrical power in single and multi-family dwellings. They may install the main circuit breaker box, plan and install electrical lines in new or existing construction and troubleshoot and make repairs to faulty lines and systems. The residential wiremen construction industry is one of the biggest sectors of the American economy. Opportunities are available for people to work at all levels in the construction industry including Residential wiremen who handle tools and materials on the job site.

The SYNOPSIS OF EACH SUBJECT OFFERED

Clinical Medical Assistant

Table 18: Synopsis of Clinical Medical Assistant

Subject	Contents of Subject – Clinical Medical Assistant Synopsis
CMA 1	Understanding the Profession - This course will provide the students with the ability to understand the profession and become successful in the healthcare industry. This unit consists of Medical and Medical Assisting, Law and Ethics, Communication Skills, and Patient Education. Prerequisite: None **Clock Hours: Lecture 08 hours/ Lab 00 hours/ Total Hours 08**
CMA 2	Administrative Medical Assistant & Managing Finances - The fundamental of administrative medical assisting and managing the finances in the practice. Answering telephone calls and greeting visitors and patients. Managing appointments, written communications, health information management, computer applications in the medical office, and management of the medical office, to include, managing the finances in the practice: Credit and Collections, Accounting Responsibilities, Health Insurance, Diagnostic Coding and Procedural Coding. Prerequisite: CMA I – Understanding the Profession **Clock Hours: Lecture 30 hours/ Lab 9 hours/ Total 39 hours**
CMA 3	The Clinical Medical Assistant & Clinical Duties - The fundamental of clinical medical assisting and clinical duties related to medical specialty: Nutrition and Wellness, Medical Asepsis and Infection Control, Medical History and Patient Assessment, Vital Signs, Sterilization and Surgical Instruments, Minor Office Surgery, Pharmacology, Preparing and Administering Medication, Diagnostic Imaging, and Medical Office Emergencies. This module will also include Clinical

	Duties Related to Medical Specialties (Dermatology, Orthopedics, Ophthalmology and Otolaryngology, Pulmonary Medicine, Cardiology, Gastroenterology, Neurology, Urology, Obstetrics, and Gynecology, Endocrinology, Pediatrics, and Geriatrics). Prerequisite: CMA II – The Administrative Medical Assistant & Managing the Finances **Clock Hours: Lecture 50 hours/ Lab 43 hours/ Total 93 hours**
CMA 4	The Clinical Laboratory - Fundamentals of Laboratory: Introduction to Clinical Laboratory, CLIA Compliance and Laboratory Safety, Phlebotomy, Hematology, Urinalysis, Microbiology and Immunology, and Clinical Chemistry. Prerequisite: CMA III – The Clinical Medical Assistant & Clinical Duties **Clock Hours: Lecture 33 hours/ Lab 38 hours/Total 71 hours**
CMA 5	Career Strategies - Competing in the job market: Student to Employee Transition, and Comprehensive Final Exam. This course is also designed to assist the student in resume development, software skills, interviewing strategies and decision-making skills to assist the student in obtaining employment. Prerequisite: CMA IV – The Clinical Laboratory **Clock Hours: Lecture 9 hours/ Lab 00/ Total 9 hours**
CMA 6	Externship - Students must complete one-hundred sixty (160) hours of real-life experience externship. Proof of completion must be turned in to their instructor. Prerequisite: CMAV – Career Strategies **Clock Hours: Lecture 00/ Lab 00/ Ext 160 hours/ Total 160 hours**

Comprehensive Clinical Medical Assistant

Table 19: Synopsis of Comprehensive Clinical Medical Assistant

Subject	Contents of Subject – Comprehensive Clinical Medical Assistant Synopsis
CCMA 1	Medical Terminology – Students will cover the Basic Medical Terminology, Term Component, Root and Suffix, Prefix, Additional Roots, Combining Vowels and Combining Forms. Anatomic Structures and Term References, Symptomatic and Diagnostic Terms, Diagnostic Tests and Procedures. Operative and Therapeutic Term, Glossary of Prefixes, Suffixes, and Combining Forms, Abbreviations and Symbols, and Commonly Prescribed Drugs. Prerequisites: None **Clock Hours: Lec 16 cl hrs/ Lab 16 cl hrs/ Ext 00 cl hrs/Total Clock Hours 32**
CCMA 2	The Medical Administrative Assisting – Students will extensively learn the flow of the medical office both theory and hands-on work. The approach of this module is both theory and hands-on work for students. Students will familiarize themselves with the computer buttons to navigate in the systems. The default-landing page upon entering the simulation is the Front Office calendar to represent opening the medical office for the day. From the point, users navigate freely throughout all the modules of the

	medical office workflow in order to practice or accomplish the specific tasks of an assignment. This module will provide a seamless instructional transition from paper-based records offices to electronic health records offices. Prerequisites: Module 1 - Medical Terminology **Clock Hours: Lec 64 cl hrs/ Lab 64 cl hrs/ Ext 00 cl hrs/Total Clock Hours 128**
CCMA 3	**The Clinical Medical Laboratory –** This module will cover: **Electrocardiogram (EKG) Technician** - students will learn the common disorders of the cardiovascular system, diagnostic, and therapeutic procedures. This includes how to calculate a patient's heart rate from the EKG tracing (e.g., 6- seconds methods, R to R, sequencing). Identify artifacts from the tracing (e.g., wondering baseline, somatic, electrical). Resolve artifacts from the tracing (e.g., wondering baseline, somatic electrical). Record and EKG on a patient: a) 3-lead, b)5-lead, 12-lead. Verify the leads recorded on an EKG. Upload a completed EKG to a patient electronic medical record. Mount a competed EKG for a patient chart. Measure a patient's heart rhythm from the EKG tracing. Inspect the waveforms of a cardiac cycle for symmetry, direction, and amplitude (e.g., P waves, QRS complexes, St Segments, T waves). Measure a patient's heart conduction from the EKG tracing (e.g., PR-intervals (PRI), QRS duration, QT-interval). Identify the major classifications of arrhythmias from the EKG tracing (e.g., sinus, atrial, ventricular, and junctional). Identify the major variances to waveforms related to ischemia, injury, or infarction. Respond to potentially life- threatening arrhythmias. Verify EKG machine paper speed (e.g., 25 mm/second, 50mm/second. Verify EKG machine sensitivity (e.g., h, 1, 2). Maintain EKG equipment and the work environment. Recognize pacemaker spikes on an EKG trace. **The Phlebotomy Technician** The Phlebotomy portion of this course, the students will study the Fundamentals of Laboratory Procedures. Identify types of clinical laboratories and request laboratories test. Familiarize yourself with quality control and safety in the laboratories. Prepare for blood collection procedures. Students will the Clinical Chemistry, Microbiology and Immunology. The Introduction to Blood Collections and Patient Preparation, Collection Techniques, Processing, Safety and Compliance Consideration, and Urinalysis specimen collection and drug testing. Students must complete 45 live venipunctures (blood drawn) and capillary (finger) sticks using vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults). Prerequisite: Module 2 – The Medical Administrative Assisting **Clock Hours: Lec 72 cl hrs/ Lab 88 cl hrs/ Ext 00 cl hrs/Total Clock Hours 160**
CCMA 4	Introduction to Clinical Medical Assisting ● This module will cover Fundamental of Clinical Medical Assisting: ● Nutrition and Wellness ● Medical Asepsis and Infection, ● Medical History and Patient Assessment ● Anthropometric Measurements and Vital Signs ● Assisting with the Physical Examination ● Sterilization and Surgical Instruments; and Assisting with Minor Office Surgery ● Discuss the Pharmacology

	• Preparing and Administering Medications • Diagnostic Imaging • Medical Office Emergencies and Disaster Preparedness • Explain the Clinical Duties Related to Medical Specialties • Dermatology • Orthopedics • Ophthalmology and Otolaryngology, • Pulmonary Medicine • Gastroenterology • Neurology • Urology • Obstetrics and Gynecology • Endocrinology • Pediatrics • Geriatrics • Catheterization for Female and Male Prerequisite: Module 2 – The Clinical Medical Laboratory **Clock Hours: Lec 56 cl hrs/ Lab 56 cl hrs/ Ext 00 cl hrs/Total Clock Hours 112**
CCMA 5	**Career Strategies –** Student will spell and define the key terms. Explain the purpose of the practicum experiences. Understand the importance of the evaluation process. List your professional responsibilities during your practicum. List personal and professional attributes necessary to ensure a successful practicum. Determine your best career direction based on your skills and strengths. Identify the steps necessary to apply for the right position and be able to accomplish those steps. Draft an appropriate cover letter. List the steps and guidelines in completing an employment application. Student will list guidelines for an effective interview that will lead to employment. Identify the steps that you need to take to ensure proper career advancement. Explain the process for recertification of a medical assisting credential. Describe the importance of membership in a professional organization. Recognize elements of fundamental writing skills. List and discuss legal and illegal applicant interview questions. Discuss all levels of government legislation and regulation as they apply to medical assisting practice. Prerequisite: Module 5 – The Clinical Medical Laboratory Assisting **Clock Hours: Lec 04 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 08**
CCMA 6	Externship - Students must complete one-hundred sixty (160) hours of real-life experience externship. Proof of completion must be turned in to their instructor. **Clock Hours: Lecture 00/ Lab 00/ Ext 160 hours/ Total 160 hours**

Electronic Health Record Specialist (EHRS) Program

Table 20: Synopsis of Electronic Health Record Specialist (EHRS) Program

Subject	Contents of Subject – Electronic Health Record (EHR) Specialist

	Synopsis
EHR 101	Introduction to Electronic Health Records – Discuss applications of electronic technology in effective communication and principles of using electronic medical records (EMRs). Execute data management using the EHR such as EMR. Use the internet to access information related to the medical office. Prerequisites: None **Clock Hours: Lec 04 cl hrs/ Lab 00 cl hrs/ Total Clock Hours 04**
EHR 102	T Overview of SimChart for the Medical Office – Discuss principles of using electronic medical records (EMRs). Use the internet to access information related to the medical office and office hardware and software to maintain office system. Prerequisite: EHR 101– Introduction to Electronic Health Record **Clock Hours: Lecture 04 hours/ Lab 04 hours/ Total 08**
EHR 103	Privacy Confidentiality, and Security – This chapter over the challenges to privacy, confidentiality, and security that are created by the widespread use of EHR system, including the HIPAA legislation. Explore the issue of confidentiality as it applies to the medical assistant. Describe the implications of HIPPA for the medical assistant in various medical settings and respond to issues of confidentiality. Apply HIPPA pf 1996 rules in regard to privacy/release of information. Recognize the importance of local, state, and federal legislation and regulations in the practice setting. Prerequisite: EHR 102 – Overview of SimChart for the Medical Office **Clock Hours: Lecture 04 hours/ Lab 04 hours/ Total 08**
EHR 104	Implementing Electronic Health Records – Discuss applications of electronic technology in effective communications and principles of using the electronic record (EMR). The use of office hardware and software to maintain office systems. Prerequisite: EHR 103 – Privacy Confidentiality, and Security **Clock Hours: Lecture 04 hours/ Lab 04 hours/ Total 08**
EHR 105	Administrative Use of the Electronic Health Record –. Explain general office policies, demonstrate telephone techniques, and document patient care. Compose professional/business letter and discuss the pros and cons of various types of appointment management systems. Describe the scheduling guidelines and recognize office policies and protocols for handling appointment. Identify systems for organizing medical records and discuss principles of using the EMR. Manage the appointment schedule using established priorities and execute data management using EHR such as the EMR. Prerequisite: EHR 104 – Implementing Electronic Health Records **Clock Hours: Lecture 04 hors/ Lab 04 hours/ Total 08**
EHR 106	Clinical Use of the Electronic Health Record – Student will document patient care and differentiate between subjective and objective information. Prerequisite: EHR 105 – Administrative Use of the Electronic Health Record **Clock Hours: Lecture 04 hours/ Lab 04 hours/ Total 08**
EHR 107	Using the Electronic Health Records for Reimbursement – Discuss principles of EMRs and execute data management using EHR such as EMR. Perform procedural and diagnostic coding, and compare processes for filling insurance claims both manually and electronically. Prerequisite: EHR 106 – Clinical Use of the Electronic Health Record **Clock Hours: Lec 04 cl hrs/ Lab 06 cl hrs/ Total Clock Hours 10**

EHR 108	The Personal Health Record – Recognize the role of patient advocacy in the practice of medical assistance. Advocate of behalf of patients and identify types of records common to the healthcare setting. Use the internet to access information related to the medical office. Prerequisite: EHR 107 – Using the Electronic Health Records for Reimbursement **Clock Hours: Lec 04 cl hrs/ Lab 06 cl hrs/ Total Clock Hours 10**

Medical Administrative Assistant

Table 21: Synopsis of Medical Administrative Assistant

Subject	Contents of Subject – Medical Administrative Assistant Synopsis
MAA 1	Medical Terminology Objectives – Students will cover the Basic Medical Terminology, Term Component, Root and Suffix, Prefix, Additional Roots, Combining Vowels and Combining Forms. Anatomic Structures and Term References, Symptomatic and Diagnostic Terms, Diagnostic Tests and Procedures. Operative and Therapeutic Term, Glossary of Prefixes, Suffixes, and Combining Forms, Abbreviations and Symbols, and Commonly Prescribed Drugs. Prerequisites: None **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
MAA 2	Introduction to Medical Assisting – Define, spell, and pronounce the term listed in the vocabulary on this module. Students will discuss competency-based education and adult learners, summarize the importance of student portfolios in providing academic success and skills competency. Examine learning preferences and interpret how learning style affects success as a student, differentiate between adaptive and nonadaptive coping mechanism, and apply time management strategies to make the most of learning opportunities. Design test-taking strategies that will help take charge of success, incorporate critical thinking and reflection to help make mental connections as learning material. Analyze healthcare results as reported in graphs and tables, apply problem- solving techniques to manage conflict and overcome barriers to success. Relate assertiveness, aggressiveness, and passive behavior to professional communication and discuss the role of assertiveness in effective communication. Prerequisites: MAA1 - Medical Terminology Objectives **Clock Hours: Lec 06 cl hrs/ Lab 06 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
MAA 3	Ambulatory Care Administration – Define, spell, and pronounce the term listed in the vocabulary on this module. Explain what a personal computer is and identify input and output hardware for personal computer. Identify internal computer components, secondary storage devices, and network and Internet access devices, explain how to maintain computer hardware, and identify principles of ergonomics that apply to a computer workstation. Differentiate between: System software and application software and electronic medical records (EMRs) and a practice management system. Explain the importance of data backup and other computer network security activities performed in the healthcare setting. Discuss applications of electronic technology and recognize the elements of fundamental writing skills. Explain the guidelines for using capitalization, numbers, and punctuation in business communication and describe

	each component of a professional business letter. Summarize the formats for business letters and memorandums and compose professional correspondence using electronic technology. Prerequisite: – MAA2 – Introduction to Medical Assisting **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
MAA 4	Coding and Medical Billing Procedures – Define, spell, and pronounce the term listed in the vocabulary on this module. Student will describe the historical use of the *International Classification of Disease* (ICD) in the United States and the transition from ICD-9-CM diagnostic coding to ICD-10-CM diagnostic coding. Identify the structure and format of the ICD-10-CM, describe how to use Alphabetic Index to select main terms, essential modifiers, and the appropriate code (or codes) and code ranges. Student will do the following related to the Tabular List: Explain how to use the Tabular List to select main terms, essential modifiers, and the appropriate code (or codes) and code range and summarize coding conventions as defined in the ICD- 10-CM coding manual. Review coding guidelines to assign the most accurate (ICD- 10-CM diagnostic code and explain how to abstract the diagnostic statement from a patient's health record. Describe how to use the most common diagnostic codes and perform diagnostic coding and identify how encoder software can help the coder assign the most accurate diagnostic codes. Explain the importance of coding guidelines for accuracy and discuss special rules and considerations that apply to the code selection process. Use tactful communication skills with medical providers to ensure accurate code section and review medical coding ethical standard. Prerequisite: MAA3 – Ambulatory Care Administration **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
MAA 5	Medical Office Administrative Functions – Define, spell, and pronounce the term listed in the vocabulary on this module. Students will define bookkeeping, and all the different transactions recorded in patient account, including the following related to patients account records: List the necessary data elements in patient account records Discuss a pegboard (manual bookkeeping) system Explain when transactions are recorded in the patient account Perform account receivable procedures for patient's accounts, including charges, payments, and adjustments Describe special bookkeeping procedures for patients account records, including credit balances, third-party payments representatives and discuss payment at the time of service, and give an example of displaying sensitivity when requesting payment for services rendered. Describe the impact of the Truth in Lending Act on collections policies for patient accounts. Discuss ways to obtain credit information and explain patient billing and payment options. Review policies and procedures for collections procedures: Describe successful collection techniques for patient's accounts Discuss strategies for collecting outstanding balances through personal finance interviews Describe types of adjustments made of patient accounts, including nonsufficient checks (NSF) and collection agency transactions.

	Define bookkeeping terms, including accounts receivable and accounts payable and discuss patient educations, in addition to legal and ethical issues related to patient account, collection, and practice management. Prerequisite: MAA4 – Coding and Medical Billing Procedures **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
MAA 6	Assisting with Medical Specialties and Career Development - Define, spell, and pronounce the term listed in the vocabulary on this module. Students will describe patient safety factors in the medical office environment and interpret and comply with safety signs, labels, and symbols and evaluate the environment to identify sand unsafe working conditions for the employee. Students will do the following when it comes to environmental safety in the healthcare setting: Identify environmental safety issues in the healthcare setting Discuss fire safety issues in a healthcare environment Demonstrate the proper use of a fire extinguisher Describe the fundamental principles for evacuation of a healthcare facility and role-play a mock environmental exposure event and evacuation of a provider's office Discuss the requirement for proper disposal of hazardous materials and identify critical elements of an emergency plan for response to a natural disaster or other emergency. Maintain an up-to-date list of community resources for emergency preparedness and describe the medical assistant's role in emergency response. Summarize typical emergency supplies and equipment, demonstrate the use if an automated external defibrillator, and summarize the general rules for managing emergencies. Demonstrate telephone screening techniques and documentation guidelines for ambulatory care emergencies and recognize and respond to life-threatening emergencies in an ambulatory care practice. Describe how to handle unresponsive patients and perform provider/professional-level CPR and discuss cardiac emergencies and administer oxygen through a nasal cannula to a patient in respiratory distress. Identify and assist a patient with an obstructed airway and discuss cerebrovascular accidents and assist a patient who is in shock. Determine the appropriate action and documentation procedures for common office emergencies, such as fainting, poisoning, animal bites, insect bites, and asthma attacks. Discuss seizures and perform first aid procedures for a patient having a seizure; discuss abdominal pain, sprains and strains, and fracture, and perform first aid procedures for a patient with a fracture of the wrist. Discuss burns and tissue injuries, and control of a hemorrhagic wound, nosebleeds, head injuries, foreign bodies in the eye, heat and cold injuries, dehydration, and diabetic emergencies; also perform first aid procedures to a patient with a diabetic emergency. Apply patient education concepts to medical emergencies and discuss the legal and ethical concerns arising from medical emergencies. Define, spell, and pronounce the term listed in the vocabulary on this module. Students will define the four personality traits that are most important to employers. Explain the three areas that need to be examined to determine one's strengths and skills and discuss career objectives and describe how personal needs affect the job search. Students will do the following related to finding a job: ● Explain the two best job search methods ● Discuss traditional job search methods

	• Describe various ways to improve opportunities • Discuss the importance of being organized in the job search Discuss the three types of resume formats, describe how to prepare a chronologic resume and cover letter; discuss how to complete an online portfolio and job and job application and describe how to create a career portfolio. Students will do the following related to the job interview: • List and describe the four phases of the interview questions • List and discuss legal and illegal interview questions • Practice interview skills for a mock interview Students will do the following related to getting a job: • Discuss the importance of the probationary period for a new employee • List some common early mistake of which a new employee should be aware • Discuss how to be a good employee and how to deal with supervisors • Explain why a performance appraisal rating is usually not perfect and discuss how to pursue a raise and how to leave a job • Discuss various skills needed in the workplace. Prerequisite: MAA5 – Medical Office Administrative Functions **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
MAA 7	Electronic Health Records Under SimChart for the Medical Office - Students will familiarize themselves with the computer buttons to navigate in the systems. The default landing page upon entering the simulation is the Front Office calendar to represent opening the medical office for the day. From this point of view, users navigate freely throughout all of the modules of the medical office workflow in order to practice or accomplish the specific tasks of an assignment. This module will provide a seamless instructional transition from paper-based records offices to electronic health records offices. Students will learn not just about technology but the application of technology in the health care industry. The approach of this module is both theory and hands-on work for students. Prerequisite: MAA6 – Assisting with Medical Specialties and Career Development **Clock Hours: Lec 20 cl hrs/ Lab 16 cl hrs/ Ext 00 cl hrs/Total Clock Hours 36**

Medical Billing and Coding Specialist Program

Table 22: Synopsis of Medical Billing and Coding Specialist Program

Subject	Content of the Subject – Medical Billing and Coding Synopsis
MBCS 101	Medical Terminology, Basic Human Anatomy and Physiology – Students will cover the Medical Terminology Basic, Term Component, Root and Suffix, Prefix, Additional Roots, Combining Vowels and Combining Forms. Anatomic Structures and Term References, Symptomatic and Diagnostic Terms, Diagnostic Tests and Procedures.

	Operative and Therapeutic Term, Glossary of Prefixes, Suffixes, and Combining Forms, Abbreviations and Symbols, and Commonly Prescribed Drugs. Prerequisites: None Clock Hours: Lecture 60 hours/ Lab 36 hours/ Total hours 96
MBCS 102	Reimbursement – Students will study the basic structure of the Medicare Program, Health Insurance Portability and Accountability (HIPAA). Including the federal register, Outpatient Resource-Based Relative Value Scale (RBRVS), Medicare Fraud, and Managed Health Care. Prerequisites: MBCS 101 – Basic Human Anatomy and Physiology, and Medical Terminology **Clock Hours: Lecture 30 hours/ Lab 18 hours/ Total hours 48**
MBCS 103	The ICD-10-CM, Using CPT, HCPCS, Modifiers and Inpatient Coding – Student will study the ICD-10-CM, ICD-CM-10 Outpatient Coding and Reporting Guidelines. This unit will cover the Introduction to CPT and Level II National Codes (HCPCS) and CPT Modifiers 22-99. Evaluation and Management (E/M) Services, Using the CPT and HCPCS codes, students will familiarize the codes of anesthesia, surgery guidelines and general surgery, integumentary, musculoskeletal, respiratory, and cardiovascular systems, these include the hemic, lymphatic, mediastinum, and diaphragm. Coding continues to digestive, urinary and male genital systems. Reproductive, intersex surgery, female genital systems, and maternity care and delivery, endocrine and nervous systems. Including eye, ocular adnexa, auditory, and operating microscope, radiology, pathology/laboratory, and medicine. Student will differentiate between inpatient and outpatient coding, selection of principal diagnoses, reporting additional diagnoses, present on admission (POA) and development of the ICD-10-PCS Prerequisites: MBCS 102 – Reimbursement **Clock Hours: Lecture 72 hours/ Lab 60 hours/ Total hours 132**
MBCS 104	Electronic Health Records – The EHR will provide students with a practical understanding of what an EHR is and its importance in today's health care industry. Health Information System is designed to train students and future users of electronic health records programs to utilize proper coding, document patient exams, diagnosis, and disorders in the medical industry. Prerequisites: MBCS 106 – Inpatient Coding **Clock Hours: Lecture 34 hours/ Lab 30 hours/ Total hours 64**
MBCS 105	Career Development – Student participate in resume building and mock interview, including job search, discuss personal and professional goals, career opportunities, marketing your skills, seeking employment, interview, salary negotiations and job termination. Prerequisites: MBCS 107 - Electronic Health Records **Clock Hours: Lecture 02 hours/ Lab 02 hours/ Total hours 04**

Nursing Assistant

Table 23: Synopsis of Nursing Assistant

Subject	Contents of Subject – Nursing Assistant Synopsis
NA 1	Introduction to Nursing Assistant Profession - Students cover the hospitals setting (acute care settings) and the long-term care centers. This includes the patients' and/or residents' rights. This chapter will elaborate on the Roles and Responsibilities of the Nursing Assistant; emphasizing the legal aspect of work ethics, communicating and collaborating with other healthcare team members, obtain information on proper handling of phone calls. Good communication skills are a key component in establishing an excellent rapport with patients/residents. This chapter also educates students on Anatomy and Physiology, by giving importance to specific structures of the body and their functions. Render quality patient care to Older Person as they progress to aging Growth and Development stage. Prerequisites: None **Clock Hours: Lec 12 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
NA 2	Safety, Prevention, and Emergency Procedures–This chapter will address how students will learn safety issues for both home care and long-term facility care. Students explore high-risk areas and develop plans for care that include all elements of safety and security. Students will familiarize themselves with the basic safety needs. Patients and residents are at great risk for accidents and falls. Therefore, this chapter will focus on how to decrease the person's risk of accidents and injuries without limiting mobility and independence. Equip the students with different safety measures that prevent falls, how to use wheel locks safely, and transfer/gait belts. Introduce The Centers for Medicare & Medicaid Services (CMS) rules and regulations for using restraints; these include the Omnibus Budget Reconciliation Act of 1978 (OBRA), CMS rules and regulations to protect the person's rights and safety. Students will cover how to prevent an infection (a disease state resulting from the invasion and growth of microbes in the body). Understand the infection is a major safety and health hazard and the goal is to protect patients, residents, visitors and staff from infection. Learn that healthcare teams follow certain practices and procedures to prevent the spread of infection (infection control). Study the body mechanics (means using the body in an efficient and careful way) that involves good posture, balance and using your strongest and largest muscles for work; fatigue, muscle strain and injury can result from the improper use and positioning of the body during activity or rest. Study the importance of the principles of body mechanics while moving patient from bed to wheelchair or wheelchair to bed. Maintaining good body alignment (posture) lets the body move and function with strength and efficiency. Standing, sitting, and lying down require good alignment. Students will learn how to transfer a person to and from surfaces (bed, chair, wheelchair, toilet, or standing position) and how to prevent work-related injuries during moving and transfer procedures. Students will familiarize the Occupational Safety and Health

	Administration (OSHA) general guidelines on preventing work-related injuries such as: minimizing manual lifting in all cases, eliminating manual lifting, when possible as well as to safely move and transfer the person. The Nursing Assistant will learn that the nurse and/or healthcare team will determine the person's dependence level, amount of help needed, and the number of staff needed, the procedure to use and equipment needed. Prerequisites: NA01 - Introduction to Nursing Assistant Profession **Clock Hours: Lec 08 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours**
NA 3	Personal Care Skills – This chapter focuses on how to assist patient/resident with comfort. Age, illness, temperature, ventilation, noise, odors, and lighting are factors that could affect comfort. Students will identify how to control temperature, ventilation, noise, odors, and lighting to meet the person's needs. Promote good personal hygiene to achieve a good sleep; good hygiene helps relaxation and increases circulation. Learn the importance of grooming such as hair care, shaving, nail and foot care; including clean garments to prevent infection and promote comfort. Identify types of uncomfortable personal hygiene such as body and breath odors, etc. Learn how to assist the patient/resident to perform grooming measures and promote independence. Observe the residents/patients that prefer to do it themselves and check adaptive devices they use for grooming. The training will cover urinary and bowel elimination, and care of Aids patients. Skills required in this area are also taught with emphasis on maintaining patient dignity and preventing complication. Students will learn how to use and dispose of incontinent pads, catheters, urinals and bedpans for patients. Assist the residents/patients' physical needs on how to use commodes safely, giving enemas, monitor urine output, etc. Prerequisite: NA02 - Safety, Prevention, and Emergency Procedures **Clock Hours: Lec 08 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
NA 4	Nutrition and Wellness – Students will learn about specialized diets; therapeutic diets, diabetic nutritional requirements and other disease processes that affect nutritional needs, and appropriate feeding methods. The person's diet affects physical and mental well- being and function. A poor diet and poor eating habits increase the risk for disease and infection, delay healing problems and could increase the risk for accidents and injuries. The Omnibus Budget Reconciliation Act of 1978 (OBRA) has requirements for food served in nursing centers. Doctors may order special diets for a nutritional deficiency or a disease. Nurse Assistants play an important role in assisting patients/residents with feeding as well as in taking vital signs to help in assessment. Along with assessment, specimens/samples (urine, stool) collection is done by Nurse Assistants to be tested to prevent, detect, to help in diagnosis and treatment. Illness, surgery, injury, pain and aging can limit activity. Inactivity, whether mild or severe, affects every body system. Nurse Assistant assists the nurse in promoting exercise and activity in all persons to the extent possible. The wound is a portal entry for microbes. Infection is a major threat. Wound care includes preventing infections and further injury to the wound and nearby tissues. The state and facility may not allow Nurse Assistant to perform the procedure (wound care) however, it is important to have knowledge on how to prevent wound infection by observation of wound dressing and proper notification to Nurses for any abnormalities. Prerequisite: NA06–Personal Care Skills

	Clock Hours: Lec 08 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12
NA 5	Care of Cognitively Impaired Residents – The students will learn the disease process that leads to loss of memory, Alzheimer's, and dementia. Measures to meet specific needs of individuals on safety and hygiene will be discussed. Students will learn to understand the diseases and appropriate care needed to maintain quality of life for patients. Recognize and understand basic human needs. Cultural and religious activities are examined and assist the aide to appreciate the vast differences that may be encountered in health and practices. This chapter explains the measures that promote oxygenation, enumerate the proper procedure on how to use the devices in administering oxygen. Disease, injury, birth defects, and surgery can affect body function. The goal is to improve abilities and function at the highest level of independence. Some adjust to a long-term disability. Some need home care or nursing center care. Many people need both nursing and rehabilitation. Understanding common health problems gives meaning to the required care. The whole person has physical, social, psychological and spiritual parts. This chapter expounds on the difference between confusion and dementia and how to assist and understand patients/residents with mental health problems. Providing safety and saving life are the main goals in taking care of patients/residents. This chapter illustrates and demonstrates the proper performance of FIRST AID CPR. Students will be trained to recognize and encourage effective coping mechanisms. Discuss and explore the grieving process and how it affects the patient, family and the health care team. This chapter illustrates the dying process. Educate the Nurse Assistant on how to properly approach the dying person with care, kindness and respect. Prerequisite: NA04–Nutrition and Wellness **Clock Hours: Lec 10 cl hrs/ Lab 02 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
NA 6	Clinical Externship – Students must complete the required 40 clock hours of Clinical Externship. This chapter is designed to reinforce the theory and laboratory skills learned in designated areas of the training. Students will be assigned to a Nursing Home and demonstrate all the skills taught during lecture and laboratory exercises. The Texas Department of Human Service' curriculums for Nurse Aide will be used at the externship site. Attendance is mandatory for clinical rotation schedules. Prerequisite: NA05–Care of Cognitively Impaired Residents **Clock Hours: Lec 00 cl hrs/ Lab 00 cl hrs/ Ext 40 cl hrs/Total Clock Hours 40**

Orthodontic Assisting

Table 24: Synopsis of Orthodontic Assisting

Subject	Content of the Subject – Orthodontic Assistant Synopsis
OA 101	Oral and Dental Anatomy and What is Orthodontics- Introduces the working environment of orthodontic assistant. Student will learn the importance of names and functions of all the organs, parts of the mouth, and the medical key term of oral anatomy, and how orthodontic assistant differs from dental assisting and the skills and traits required being a valued assistant. Students will familiarize themselves with the names of other positions commonly found in an orthodontist's office.

	Prerequisite: None **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 102	The Orthodontic Appliance – This chapter introduces the basic orthodontic appliance part. Students will learn the parts of the "Orthodontic Appliance" and how they relate to each other. Prerequisite: OA101 – Oral and Dental Anatomy and What is Orthodontics **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 103	Archwire Selection, Placement, and Termination–Students will learn the purpose of Archwire and how it serves as the main source of force which moves the teeth. Prerequisite: OA102 – The Orthodontic Appliance **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 104	Headgears and Elastic– The functionality and the difference between the extra-oral auxiliaries –headgears and intra-oral-auxiliaries –elastics. Prerequisite: OA103 – Archwire Selection, Placement, and Termination **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 105	Secondary Appliance– Covers the difference between fixed and removable appliances; the difference between active and passive appliances; and type of appliances. Prerequisite: OA104 – Headgears and Elastic **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 106	Application of Orthodontic Appliance–Familiarize with separators or spacers, orthodontics bonds, and bonding or orthodontic appliances. Prerequisite: OA105 – Secondary Appliance **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 107	Removal and Retention – This chapter covers the removal of braces, retention, and post-treatment procedures. Prerequisite: OA106 - Application of Orthodontic Appliance **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 108	Diagnostic Records–Covers the diagnostic records, impressions, bite registration, orthodontic X-Rays (panoramic and cephalometric) and photographic techniques, and digital record. Prerequisite: OA107 - Removal and Retention **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 109	Radiation and X-Ray Safety - Introduces the discovery of X-ray and importance of the X-ray equipment in the practice. This chapter also covers radiation safety, handling the X-ray cassette, and familiarizes the darkroom. Prerequisite: OA108 - Diagnostic Records **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 110	Orthodontic Models – Introduces different types of models, how to pour models, separate and trimming models, and alternative to standard study models.

	Prerequisite: OA109 - Radiation and X-Ray Safety **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 111	Patient Management – Covers the chair, patient, and body positioning, and physical interaction with patient. This includes checking the appliance. Patient instruction with oral hygiene and appliance care, charting, and patient communication. Prerequisite: OA110 - Orthodontic Models **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**
OA 112	Infection Control in Orthodontics and Professionalism in Orthodontics – Introduces infection control, disinfection and sterilization, protecting our patient and us. Covers the expectation in the real world of orthodontics, interview and resume, including professionalism in the office. Prerequisite: OA11 - Patient Management **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**

Patient Care Technician/Assistant (PCT/A)

Table 25: Synopsis of Patient Care Technician/Assistant (PCT/A)

Subject	Contents of Subject – Patient Care Technician/ Assistant Synopsis
PCT 101	Medical Terminology Objectives – Students will cover the Basic Medical Terminology, Term Component, Root and Suffix, Prefix, Additional Roots, Combining Vowels and Combining Forms. Anatomic Structures and Term References, Symptomatic and Diagnostic Terms, Diagnostic Tests and Procedures. Operative and Therapeutic Term, Glossary of Prefixes, Suffixes, and Combining Forms, Abbreviations and Symbols, and Commonly Prescribed Drugs. Prerequisites: None **Clock Hours: Lec 06 cl hrs/ Lab 06 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
PCT 102	Phlebotomy – Student demonstrate understanding on Anatomy of the venipuncture sites from which the worker is authorized to access blood. Students will demonstrate the following during venipuncture as standard of practice: ● Infection prevention control. ● Perform standard precautions such as hand washing and wearing non-sterile gloves ● Use of alcohol prep pads for skin disinfection ● Cleaning and disinfection of materials used on more than one patient such as tourniquets and scissors ● Proper disposal of sharps in biohazard receptacle ● To protect patients. ● Identify patient's name before blood drawing

	• Awareness of the policy especially in seeking help after a defined number of unsuccessful draws • Awareness implied, informed consent and patient's rights • Awareness on contraindication to blood draws including drawing on the same side after mastectomy or through infected or scarred tissues • Protection of the health worker • Hepatitis B immunization • Awareness of high-risk devices and practices • Ability to state who and when to contact for support in the event of exposure to blood and body fluids • Avoidance of two-handled needle recapping • Placement and use of sharps container within reach • Appropriate use of personal protective equipment including gloves • Practice taking blood samples, including blood sampling and simulated blood sampling (capillary blood, arterial blood, venous blood from adults and children according to responsibilities • Demonstrates special techniques such as: • Capillary puncture • Heel and finger-pricks • Lancets • Capillary tubes (filter paper, capillary blood tubes, rapid test strips, etc.) • Large volume (bloodletting – aware that this must be done under direct physician order and management) • Winged infusion set • Evacuated tubes • Laboratory practices, including type of samples, forms, labeling and transportation Prerequisite: PCT01 – Medical Terminology **Clock Hours: Lec 28 cl hrs/ Lab 20 cl hrs/ Ext 00 cl hrs/Total Clock Hours 48**
PCT 103	Introduction to Patient Care/Infection Control/Legal Issues/Human Anatomy and Physiology and Brief Description of Medical Condition, Diseases and Disorder – Student will learn the how to communicate to the patient and family in therapeutic manner. Activities of daily living such us providing proper grooming, giving patient a bathe, etc. will be demonstrate to the students and return demonstration by the student will be done after. Safety precautions and infection prevention are the most important ways to promote health. Infection control refers to policies and procedures used to minimize the risk of spreading infections, especially in hospitals and human or animal health care facilities. The goal of infection control is to reduce the occurrence of infectious diseases. Bacteria or viruses or some other pathogens usually cause these diseases.

	Infections contracted in hospitals are also called nosocomial infections or healthcare-associated infections (HAIs). Standard precautions and transmission-based precautions are the main fundamental principles of infection prevention. Standard Precautions represent the minimum infection prevention measures that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where healthcare is delivered. It includes: 1) hand hygiene, 2) use of personal protective equipment (e.g., gloves, gowns, facemasks), depending on the anticipated exposure, 3) respiratory hygiene and cough etiquette, 4) safe injection practices, and 5) safe handling of potentially contaminated equipment or surfaces in the patient environment. The categories of Transmission-Based Precautions include: 1) Contact Precautions may it either be human to human contact, animal to human contact or skin contact with an infected surface, 2) Droplet Precautions, 3) Airborne Precautions, (4) Vectors – animals that carry disease agents from one host to another. All facility staff are educated and trained by designated personnel regarding proper selection and use of PPE. And proper use of PPE is demonstrated in this course. Anatomy and physiology are the study of the structure and functions of body parts and how all the body parts work and carry out their life-sustaining activities. A brief description of medical conditions, diseases and disorders will be discussed as well as the causes, risk factors and clinical signs and symptoms. Prerequisites: PCT02 – Phlebotomy **Clock Hours: Lec 12 cl hrs/ Lab 11 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
PCT 104	Physical Assessment and Examination Patient Positioning and Bed Mobility Techniques and Range of Motion (ROM)– This course provides the students with the knowledge and skill necessary to perform a comprehensive health assessment utilizing the skills of history taking, inspection, palpation, percussion, and auscultation. Normal assessment findings, frequently seen variations from normal and cultural differences are discussed. Demonstrate history-taking and interviewing skills necessary for comprehensive data collection. Analyze the importance of proper patient positioning primarily for patient comfort and to promote lung and cardiac function. Goals of patient positioning are enumerated. Explain the different patient positions and how to prevent skin breakdown. Principles of Maintaining good body alignment. Learn the proper documentation using SOAP Notes. In this course this module we explore the anatomy and physiology underlying the vital signs so that students will develop a systematic, integrated understanding of how the body functions. Relevant body systems are reviewed including cardiovascular and respiratory, followed by explanations of how the function of these systems affect vital signs. We discuss normal ranges, normal variants, and the mechanisms that underlie changes in the objective measurement of vital signs.

	The course also includes demonstrations of appropriate techniques for measuring vital signs. Evaluate range of motion. Enumerate the types of range of motion exercises and precautions for performing range of motion on patients with specific conditions. Explain the definition of therapeutic exercises and enumerate the process in performing therapeutic exercises. Prerequisite: PCT03 – Introduction to Patient Care/Human Anatomy and Physiology **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
PCT 105	Gait/Assistive Devices/Orthosis/Prosthesis/Transfer Technique – Student will define and understand the basic gait terminologies. Explain the general principles of Assistive Devices. Instructor demonstrates the different types of weight bearing patterns with assistive devices, performs proper use of crutches, canes, walkers and student will get to do return demonstration after. Understand the advantages and disadvantages of using axillary crutches, cane, forearm crutches and walkers. Discuss ascending stairs and curbs, descending stairs and curbs. In this module, students will learn the functions of an orthosis/prosthesis device. Discuss patient care for orthosis and prosthesis. Students will learn to demonstrate proper transfer techniques on dependent, assisted and independent patients. Identify safety considerations, render assistance to fallen patients, transferring patients are the highlights of this module. Prerequisite: PCT04 – Physical Assessment and Examination Patient Positioning and Bed Mobility Techniques and Range of Motion (ROM) **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
PCT 106	Wound care and Pressure Sores/Wheelchair Management and Patient Care and Competency Skills – Discussion is focus on factors that causes pressure sores and its stages, define wound and phases of wound healing, types of wound debridement, skin care and preventing bed sores and application of dressings. In this module, types of wheelchairs and its component measurements and proper use will also be discussed. Students will learn and perform competency skills such as hand washing, providing bed bath and back rubs, make an occupied bed, assist with range of motion exercises, helping undressing and dressing patients, obtain and record height and weight, assist with applying and removing prosthesis/orthosis devices, assist in applying binders, bandages and Ted hose stockings, urine output measurement, collect urine and stool specimen, demonstrate perineal care, catheter care, use of gait belt and transfer belt during ambulation, lifting patient with the use of hoyer lift, assist patient in using bed pan, feeding the patients, administer foot care, perform denture care, mouth care and hand and nail care. Prerequisite: PCT05 – Gait Devices/Transfer Techniques **Clock Hours: Lec 06 cl hrs/ Lab 06 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**

PCT 107	Special Topics Part 1-4 - Students will identify postural imbalance, define differentiate confusion and dementia, nutrition and meal. Learn to perform intake and output measurement. Demonstrate the procedure of Ostomy care. Illustrate draping techniques. Define and understand Aphasia and its types. Describe how to handle unresponsive patients and perform provider/professional-level CPR and discuss cardiac emergencies and administer oxygen through a nasal cannula to a patient in respiratory distress. Identify and assist a patient with an obstructed airway and discuss cerebrovascular accidents and assist a patient who is in shock. Determine the appropriate action and documentation procedures for common office emergencies, such as fainting, poisoning, animal bites, insect bites, and asthma attacks. Discuss seizures and perform first aid procedures for a patient having a seizure; discuss abdominal pain, sprains and strains, and fracture, and perform first aid procedures for a patient with a fracture of the wrist. Discuss burns and tissue injuries, and control of a hemorrhagic wound, nosebleeds, head injuries, foreign bodies in the eye, heat and cold injuries, dehydration, and diabetic emergencies; also perform first aid procedures to a patient with a diabetic emergency. Apply patient education concepts to medical emergencies and discuss the legal and ethical concerns arising from medical emergencies. Students will demonstrate discharge and transfer of patients. Students will be able to identify all Levels of Need. Demonstrate understanding in and End of Life Care. Demonstrate management of Fall in Elderly. Demonstrate Relaxation Exercises. Students will do the following: Explain gait belt and its uses Demonstrate breathing exercises Demonstrate understanding in therapeutic services Demonstrate understanding Psychological and Personality Disorders Understand Death and Dying Demonstrate understanding on Restraints and Incident Reports Demonstrate understanding Safety Data Sheets (SDS) Therapeutic communication Prerequisite: PCT06 – Wound care and Pressure Sores/Wheelchair Management Medical Office Administrative Functions **Clock Hours: Lec 12 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
PCT 108	Ectroencephalogram – This module will take the students through the fundamentals of ECGs, including: Understand basic cardiac anatomy and physiology Interpret and understand cardiac rhythms Identify components of the ECG waveform Evaluate and analyze ECG rhythm strips Recognize common ECG dysrhythmias Understand the common causes Consequences and patient management strategies for ECG dysrhythmias Prerequisite: PCT07– Special Topics Part 1-4 **Clock Hours: Lec 24 cl hrs/ Lab 24 cl hrs/ Ext 00 cl hrs/Total Clock Hours 48**

	Prerequisite: OA107 - Removal and Retention **Clock Hours: Lec 03 cl hrs/ Lab 09 cl hrs/ Total Clock Hours 12**

Pharmacy Technician

Table 26: Synopsis of Pharmacy Technician

Subject	Contents of Subject – Pharmacy Technician Synopsis
PhT 101	Introduction and Fundamentals of Pharmacology—Introductory course that gives an overview of the pharmacy technician's role and responsibilities and opportunities open to certified pharmacy technicians. Topics discussed include the pharmacist-technicians relationship, pharmacy ethics, and effective patient communication, brief history of healthcare and pharmacy and hospital organizations and department functions. Prerequisite: None **Clock Hours: Lecture 06 hours/ Lab 0 hour/ Total 06**
PhT 102	Pharmacy Law and Ethics— Legal aspects of pharmacy practice will be discussed including accountability, the Food and Drug Administration (FDA) Controlled Substance Act, Poison Prevention Act, Act, OBRA and HIPAA regulations. Students will be able to identify the professions that may prescribe medications and appropriate or inappropriate limitations. Prerequisite: PhT I - Introduction and Fundamentals of Pharmacology **Clock Hours: Lecture 06 hours/ Lab 03 hours/ Total 09**
PhT 103	Anatomy & Physiology— Overall objective of this module is to acquire knowledge of the anatomy and physiology of the human body. Includes an overview of the diseases related to each anatomical system. Prerequisite: PhT II - Pharmacy Law and Ethics **Clock Hours: Lecture 18 hours/ Lab 00 hours/ Total 18 hours**
PhT 104	Medical & Pharmaceutical Terminology—This module is designed to provide the student with an understanding of the medical language utilized by healthcare professionals. These words relate to the body systems, anatomical structures, medical diagnosis and procedures. Studies of medical and pharmaceutical words are parts used to build medical and pharmaceutical terms. Common abbreviations used in prescription and medical orders included. Prerequisite: PhT III - Anatomy & Physiology **Clock Hours: Lecture 01 hour/ Lab 01 hour/ Total 02 hours**
PhT 105	Pharmacology I—This course will acquaint the student with the medication distribution systems used in retail and hospital pharmacies, including individual prescription, floor stock distribution, unit dose system, compounding, IV mixture and quality assurance. Students will review mathematical, apothecary, and metric systems, calculate dosages and learn to use drug reference

	materials. Students will demonstrate knowledge found on stock bottle labels and how to use it. Prerequisite: PhT V/ - Asepsis & Infection Control **Clock Hours: Lecture 07 hours/ Lab 09 hours/ Total 16**
PhT 106	Drug Classification—This course is a study of the basic understanding of pharmacology. It gives the foundation knowledge about drugs by learning the names of many prohibited and prescribed drugs; including diseases, and diagnosis or disorders associated with the use of these drugs. Prescription containers and closures addressed including the requirements for using child-resistant containers. Prerequisite: PhT VI- Pharmacology I **Clock Hours: Lecture 08 hours/ Lab 08 hours/ Total 16**
PhT 107	Pharmaceutical Compounding—This course is the study of the concepts and design, preparation, use and evaluation of solid and semi-solid dosage forms. Specific topics include powders, tablets, capsules, coated dosage forms, suspensions, emulsions, magmas, gels, lotions, ointments, creams, pastes, suppositories, transdermal systems, sustained release products and novel drug delivery systems. Prerequisite: PhT VII - Drug Classification **Clock Hours: Lecture 03 hours/ Lab 05 hours/ Total 08**
PhT 108	Pharmacology II—A study of human disease processes and rational pharmacotherapeutics relating to fluids and nutrients, the body systems, antimicrobial therapy and chemotherapy. Emphasis is placed on the indications, contraindications, and mechanism of action, side effects, dosage and methods of administration. Discussions include how these principles can be utilized in pharmacy practice. Prerequisite: PhT VIII - Pharmaceutical Compounding **Clock Hours: Lecture 04 hours/ Lab 12 hours/ Total 16**
PhT 109	Non-Prescription Drugs—This course reviews the categories of the over-the counter medications, explains the types and procedures of home monitoring equipment and provides guidelines for patient counseling. Durable and surgical/non-durable medical products are explained. The broad concept of wellness, home remedies and the non- traditional options are highlighted. Prerequisite: PhT IX - Pharmacology II **Clock Hours: Lecture 04 hours/ Lab 08 hours/ Total 12**
PhT 110	Drug Information Research—This course includes the discussion of the concepts of obtaining pertinent information and data collection including the patient medical record, patient interviews, and new HIPAA confidentiality issues, prescribed drug use interviews, literature resources, and problem solving. Students will demonstrate proficiency in prescription requirements (i.e., phone orders, controlled substances, facsimile, transfer, etc.). Prerequisite: PhT X- Non-Prescription Drugs **Clock Hours: Lecture 02 hours/ Lab 05 hours/ Total 07**

PhT 111	Pharmacy Management—This course includes discussion of pharmacy functions related to drug purchasing, inventory control recalls and returns and maintaining transaction records. This class explores retail functions such as merchandising. Prerequisite: PhT XI - Drug Information Research **Clock Hours: Lecture 05 hours/ Lab 03 hour/ Total 08**
PhT 112	Computers in the Pharmacy—This course will enable the student to have the basic understanding of pharmacy computer systems. Prerequisite: PhT - Pharmacy Management **Clock Hours: XII Lecture 00 hours/ Lab 04 hours/ Total 04**
PhT 113	Career Development —This course is designed to assist the student in resume development, software skills, interviewing strategies and decision-making skills to assist the student in obtaining employment. Optional externships are encouraged to offer the student the opportunity for real-life experience. Prerequisite: PhT XIII - Computers in the Pharmacy **Clock Hours: Lecture 05 hours/ Lab 04 hours/ Total 09**
PhT 114	Certification Exam Review—This workshop is designed to offer the student specific and preparation (review) for the National Healthcareer Association, ExCPT and the PTCB certification exam. Emphasis will be on tasks for mastery. Prerequisite: Career Development **Clock Hours: PhT XIV/ Lecture 00 hours /Lab 05 hours/ Total 05**

Solar Energy Technician

Table 27: Synopsis of Solar Energy Technician

Subject	Contents of Subject: Electrical Fundamentals Synopsis
PV 101	PV Fundamentals – This course introduces students to a career in the solar industry. Students will gain an overview of the state of the Photovoltaic market and career opportunities. Students will learn essential PV fundamentals, and will gain a solid understanding of various components, system architectures, and applications for PV systems Topic include site analysis, system sizing, array configuration, and performance estimation; electrical design characteristics such as wiring, overcurrent protection, and grounding; a detailed look at module and inverter specifications and characteristics; mounting methods for various roof structures and ground mounts; and an introduction to safely and effectively commissioning grid- direct PV systems. This course focuses on grid-direct PV systems, the largest and fastest growing segment of the PV industry but covers material critical to understanding all types of PV systems. These core concepts are expanded on in SCI's upper-level PV courses, which focus more specifically on system types, applications and design methodologies.

	Prerequisites: None **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
PV 102	PV System Design – The student will apply the principles of solar energy, site analysis, cost vs. payback, sizing, energy audit, and to Design PV rooftop, and ground mount systems. Students will receive advanced instruction in the National Electrical Code requirements, design parameters, and best design practices applicable to all types and sizes of PV installations. Detailed lessons address requirements for disconnects, overcurrent protection, and wire sizing; interconnection requirements and calculations; grounding, ground-faults, and surge protection; calculations for system sizing, inverter selection, and electrical configuration; Labs will focus on using the latest online tools to assist in designing systems. Prerequisites: PV101- PV Fundamentals **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
PV 103	PV Grid Tie Systems - This course will give the students advanced instruction in Grid Tied PV solar systems. Students will learn about current solar collection and conversion equipment, and how to size grid-tied systems and to install these systems for maximum performance for both roof top and ground mount applications. Students will layout and orient these systems using standard industry tools such as a solar path finder. Students will be introduced to basic electrical concepts, conduit bending, wiring and roof attachments and penetrations. Students will be introduced to National Electrical Code (NEC) and will learn how it relates to PV solar in the United States. Students will start their student led PV solar project where they will design, procure, manage, and install a PV solar power plant. Prerequisite: – PV102- PV System Design **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
PV 104	Stand Alone Systems – This course builds on concepts learned earlier in PV 102 Grid Tied Solar Systems, this course expands upon the use of photovoltaic commercial and utility scale systems. Topics included are troubleshooting and maintenance practices as well as battery back-up and off-grid applications. Solar Stand-Alone Systems exposes the student to additional labs having to do with panel racking and installation and testing. Sizing systems with battery storage and usage calculations for off-grid applications will be part of the course. Prerequisite: PV103 - PV Grid Tie Systems **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
PV 105	PV Construction Project Management – This course will introduce the student to PV solar construction project management. Students will go beyond just PV system installation and learn the world of PV construction project management. Students will learn Cost, Time, Scope, and Quality management. Students will learn the project management fundamentals, including solar

	construction techniques, terminology and construction materials in detail. Students will learn project planning, scheduling, management, and closeout. Prerequisite: PV104 - Stand Alone Systems **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
PV 106	PV System Interconnection, Code, Compliance, Commission, Testing, and Inspections – Students will learn PV system interconnection code requirements and compliance. Students will learn all the tests and inspections required for the interconnection of a PV solar system, for both roof top and ground mount systems. The course will reinforce the National Electrical Code (NEC 690). Students will learn Permitting and sample forms from local jurisdictions will be explored. Prerequisite: PV105 - PV Construction Project Management **Clock Hours: Lec 15 cl hrs/ Lab 05 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**

Solar Maintenance Technician Program

Table 28: Synopsis of Solar Maintenance Technician Program

Subject	Contents of Subject: Solar Maintenance Technician Program Synopsis
SMT 101	This course introduces students to the core principles of photovoltaic (PV) energy and electrical fundamentals. Students will learn about electromagnetism, basic electrical theory, solar irradiance, and essential PV system components. The curriculum includes hands-on labs measuring solar irradiance and learning the use of electrical testing tools. **Clock Hours: Lec 32 cl hrs/ Lab 08 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
SMT 102	This module covers critical OSHA and NFPA 70E safety regulations, including lockout/tagout (LOTO), arc flash safety, ladder safety, emergency action plans (EAP), and confined space hazards. Students will participate in hands-on safety drills, hazard assessments, and a group arc flash simulation project. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 103	This subject focuses on PV system design for large-scale solar farms, including the National Electric Code (NEC), wire sizing, voltage drop calculations, and grounding requirements. Students will learn how to design compliant wiring systems and troubleshoot potential issues. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 104	This module dives into high-voltage electrical integration, covering overcurrent protection, transformers, combiner boxes, and disconnects. Students will learn how to troubleshoot and maintain Sungrow inverters, battery storage systems, and PV wiring infrastructure. **Clock Hours: Lec 32 cl hrs/ Lab 08 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
SMT 105	This subject covers the major components of a solar power plant, including SCADA systems, meteorological stations, switchgear, and grid interconnection.

	Students will work with real-time monitoring systems and predictive maintenance tools. **Clock Hours: Lec 32 cl hrs/ Lab 08 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
SMT 106	With the expansion of grid-scale battery storage, this subject focuses on battery anatomy, charge controllers, inverter integration, and system troubleshooting. Students will learn safe handling, installation, and maintenance of lithium-ion storage systems. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 107	Students will explore SCADA software, performance analytics, and cybersecurity. They will practice real-time fault detection, predictive maintenance strategies, and system optimizations for solar energy plants. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 108	This module covers preventive and corrective maintenance techniques for solar O&M. Students will practice diagnosing system faults, optimizing efficiency, and performing routine inspections. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 109	Students will study solar permitting, grid interconnection policies, and environmental regulations, including Stormwater Pollution Prevention Plans (SWPPP). **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 110	Technical skills are only part of a successful career. This module focuses on teamwork, leadership, professional communication, and career development. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 111	Students will learn stormwater management regulations, best practices, and compliance measures for solar construction sites. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
SMT 112	This final week consists of comprehensive reviews, practical skills assessments, and capstone projects. **Clock Hours: Lec 16 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**

Construction Electrician Program

Table 29: Synopsis of Construction Electrician Program

Subject	Contents of Subject: Construction Electrician (ELEC 201)
ELEC 101	Electrical Fundamentals –This course introduces students to careers in the electrical trade. Students will learn the necessary terms, mathematical equations, circuitry, and navigation of the National Electrical Code (NEC). Academic topics of study include electrical symbols, alternating current (AC), direct current (DC), circuit diagrams, basic electrical math, Ohm's Law, and reading blueprints. In the lab portion of the course, students will learn hands-on about using the proper tools and methods of using tools safely. Safety is the primary goal in the labs.

	Prerequisites: None **Clock Hours: Lec 60 cl hrs/ Lab 20 cl hrs/ Ext 00 cl hrs/Total Clock Hours 80**
ELEC 102	The residential wiring module will build upon the fundamentals course. With an understanding of the concepts in electrical theory, the students will build on that knowledge with a focus in residential electrical work. Specifically, this module will familiarize students with the rules and standards of residential electrical construction such as ground fault circuit interrupters, arc fault circuit interrupters, reading prints, using a meter, and mandatory residential requirements. Labs in this section include residential wiring practices, meters, lights, groundings, and remodel. Prerequisites: ELEC 101 **Clock Hours: Lec 45 cl hrs/ Lab 25 cl hrs/ Ext 00 cl hrs/Total Clock Hours 70**
ELEC 103	Elect 103 will focus on the commercial aspects of the electrical trade. Topics in this module will include grounding and bonding, wiring, underground conduits, working space, print reading, automation, conduit bending, and safety. Labs associated with this module include conduit bending, wire pulling, device terminations, pipe racks, and trim-out. Prerequisite: – EL102- Residential wiring **Clock Hours: Lec 90 cl hrs/ Lab 50 cl hrs/ Ext 00 cl hrs/Total Clock Hours 140**
ELEC 104	For the fourth module of the course, the student will learn about industrial electrical applications, as well as specialty areas like swimming pools, PV systems, and generators. This module will also cover motors and motor controls, since these systems are more typically a part of industrial applications than residential and commercial. In this section, the NEC will focus on the more specific sections of the codebook to familiarize the students with other aspects of the electrical field. Hands on work in this module will focus on conduit running, complex switching, lighting types, dual voltage motors, and PNIDs. Prerequisite: ELEC 103, Commercial Wiring **Clock Hours: Lec 90 cl hrs/ Lab 40 cl hrs/ Ext 00 cl hrs/Total Clock Hours 130**
ELEC 105	In the final module of the Construction Electrician Certification, students will learn how to run a job site, manage material, lay-out prints, directing personnel resources, preparing for inspections, RFIs, and the importance of scheduling and labor management. By completing this segment of the program, students will understand how the job site functions and how to turn in jobs on time, on budget, and without the need for excessive service calls. There will be a section which deals solely with construction management and types of contracts. Upon completion of the course students will be able to safely, confidently, and productively enter the electrical construction workforce. Prerequisite: PV104 - Stand Alone Systems **Clock Hours: Lec 45 cl hrs/ Lab 25 cl hrs/ Ext 00 cl hrs/Total Clock Hours 70**

RW 101	SAFETY AND THEORY – Residential workplace safety. Electrical hazards associated with electrical work, purpose of NFPA 70E Standard for Electrical Safety in the workplace, purpose of OSHA and its examples that apply to various general and electrical safety hazards associated with residential wiring, personal protective used by residential electricians, several safety practices pertaining to general and electrical safety, safety data sheet (SDS) and various classes of fires, types of extinguishers used and the fire triangle. Prerequisite: None Clock Hours: Lecture 20 hours/ Lab 00 hours/ Total Hours 20
RW 102	Preparing and Planning a Residential Wiring Job – This module is designed to show students how to apply common safety practices; how to use materials, tools and testing instruments; and how to read and understand residential building plans. Determine the requirements for branch circuits, feeder circuits and service entrances are also covered in this module. Prerequisite: RW 101 – Safety and Theory Clock Hours: Lecture 10 hours/ Lab 10 hours/ Total 20 hours
RW 103	Service Entrances & Equipment and Residential Electrical System Rough-In The content includes material on how to install the necessary equipment to get electrical power from the electric utility to the dwelling unit and demonstration on how to install electrical boxes and run cable or raceway according to the electrical circuit requirements. Selection of appropriate wiring methods, conductor types and electrical boxes for a residential electrical system rough-in, demonstration of NEC general requirements for the following: residential rough-in wiring, for wiring methods used in residential rough-in wiring and for conductors used in residential rough in wiring. Prerequisite: Preparing and Planning a Residential Wiring Job Clock Hours: Lecture 20 hours/ Lab 30 hours/ Total 50 hours

RW 104	Residential Electrical System Trim-Out – Installation of all the switches, receptacles and luminaires (lighting fixtures) throughout the house. Students will learn common lamp and lighting fixture terminology and the four different lamp types used in residential wiring applications: incandescent, LED, fluorescent and high-intensity discharge, selecting a lighting fixture for a specific residential living area, installation of common residential lighting fixtures. Installation of ceiling-suspended paddle pans are also covered and demonstrated in this subject. Prerequisite: Service Entrances & Equipment and Residential Electrical System Rough-In Clock Hours: Lecture 20 hours/ Lab 30 hours/Total 50 hours
RW 105	Maintaining and Troubleshooting A Residential Electrical Wiring System - Explains how to test each circuit to make sure they are installed according to NEC requirements and are in proper working order. The contents also show how to troubleshoot and correct problems to ensure a satisfied customer. The module also covers the material that every electrician should know so that the home they are wiring has the most up-to-date and efficient green electrical system possible. Prerequisite: Residential Electrical System Trim-Out Clock Hours: Lecture 10 hours/ Lab 10/ Total 20 hours

Comprehensive Dental Assisting

Table 30: Synopsis of Comprehensive Dental Assisting

Subject	Contents of Subject: Comprehensive Dental Assistant Synopsis
CDA 101	The Dental Assistant Profession (8 hours of lecture and 8 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to the dental assisting profession. Students will learn the role of professional dental assistants in dental office facilities and the application of standard of care under the Dental Practice Act through patient processing, chairside assisting, risk management, guidelines for informed consent, patients' records including the guidelines for charting entries for clinical record, reporting child abuse and neglect, regulatory, credentialing, and professional organizations. (No Prerequisite) **Clock Hours: Lec 10 cl hrs/ Lab 10 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CDA 102	Sciences in Dentistry (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, define, and locate structures and functions of the human body through class discussions and demonstrations with special emphasis on general anatomy, oral anatomy, and dental nomenclature as an important part in the practice of dentistry. (Prerequisite CDA 101) **Clock Hours: Lec 14 cl hrs/ Lab 06 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CDA 103	Oral Health Preservation and the Prevention of Dental Disease (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to oral health preservation and prevention of dental disease through class discussions and demonstrations. They will also learn the importance of good oral health in relation to general health; the dental disease process and how to prevent it. They will be required to do a presentation on how the two most common dental disease processes, such as dental caries and periodontitis, takes place. They will demonstrate good oral hygiene practices such as proper brushing and flossing technique to be able to perform oral hygiene instructions (OHI) to educate patients and perform topical fluoride application which is an essential duty of a dental assistant. (Prerequisite CDA 102) **Clock Hours: Lec 15 cl hrs/ Lab 25 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
CDA 104	Infection Prevention in Dentistry (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to microbiology, disease transmission, and infection control. The significant role of a dental assistant in disease control in the dental office as required by the Occupational Safety and Health Administration (OSHA) and Center for Disease Control and Prevention (CDC) will be thoroughly discussed and demonstrated. Students will be required and graded to simulate proper infection control protocol. (Prerequisite CDA 103) **Clock Hours: Lec 10 cl hrs/ Lab 10 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**

CDA 105	Occupational Health and Safety (8 hours of lecture and 8 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to occupational health and safety. They will also learn the roles and responsibilities of the various agencies and how they affect the dental office. Students will learn how to handle chemicals safely, how to identify correctly dispose of waste materials, and why it is important to maintain the dental unit waterlines. In addition, students will learn how to protect themselves against workplace injuries. Injuries commonly associated with the clinical practice of dental assisting include headaches; back, neck and shoulder pain; and other musculoskeletal disorders. (Prerequisite CDA 104) **Clock Hours: Lec 10 cl hrs/ Lab 10 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CDA 106	Patient Information and Assessment (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to patient information and assessment. They will have background knowledge and skills to assist the dentist in assessing a patient's overall health and dental health status. This includes diagnostic information, working with medically compromised patients, or assisting the team in a medical emergency, students will be able to understand that value of being a member of the dental team. They will perform paperwork and digital (Dentrix) charting of patient's medical and dental records, take vital signs and photos. Students must demonstrate the correct transfer of a wheelchair-bound patient; aid the dentist in providing treatment; serve as a source of information for the patient and the family; and make the patient more comfortable and reduce their anxiety as well. (Prerequisite CDA 105) **Clock Hours: Lec 08 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CDA 107	Foundation of Clinical Dentistry (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to the foundation of clinical dentistry. They will learn the dental office layout, how clinical skills are performed, how dental care is delivered, the specific instruments and supplies used in most general dental procedures, and the importance of patient comfort during dental treatment with the use of moisture control, as well as anesthesia and pain control methods. Students are required and tested to prepare the dental treatment area for patient care; chairside assistance; instruments, materials, and equipment identification; and setting up and breaking down the operative room. (Prerequisite CDA 106) **Clock Hours: Lec 20 cl hrs/ Lab 40 cl hrs/ Ext 00 cl hrs/Total Clock Hours 60**
CDA 108	Radiographic Imaging (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms to dental radiography. The students will learn how to use x-radiation to produce diagnostic-quality images with minimal exposure, manage patients, maintain proper infection control, legalities of dental radiography, and follow radiation safety procedures. They will also learn the basic principles and techniques for film-based and digital imaging. Students will be required to perform, demonstrate and get tested to identify the instruments, materials, and equipment necessary for intraoral dental radiography as well as to take manual and digital x-rays on a manikin and live patients, and transfer the digital images taken to patient's record on Dentrix. (Prerequisite CDA 107) **Clock Hours: Lec 20 cl hrs/ Lab 40 cl hrs/ Ext 00 cl hrs/Total Clock Hours 60**

CDA 109	Dental Materials (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to dental materials. Students will have a level of background knowledge and skills necessary to become competent with dental materials used today in the clinical setting. They will be required to perform, demonstrate, and get tested to identify the instruments, materials, and manipulation of materials such as resin and amalgam materials, placement and removal of gingival retraction cord, mixing cements and bases for cavity and crown preparations, alginate impressions, and prepare acrylic for provisional coverage. (Prerequisite CDA 108) **Clock Hours: Lec 10 cl hrs/ Lab 30 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
CDA 110	Assisting in Comprehensive Dental Care (80 hours of lecture and 112 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to assisting in comprehensive dental care. They will be provided with a level of knowledge and skill that will prepare them for clinical dentistry. They will be required to demonstrate clinical competency in the general and specialized areas of dentistry. They will also be prepared for graduation, taking the Texas State Board of Dental Examiners (TSBDE) and Dental Assisting National Board, Inc. (DANB) exams, and a career in dental assisting. (Prerequisite CDA 109) **Clock Hours: Lec 80 cl hrs/ Lab 40 cl hrs/ Ext 00 cl hrs/Total Clock Hours 120**
CDA 111	Dental Administration and Communication Skills (16 hours of lecture and 16 hours of laboratory): Students will learn how to pronounce, spell, identify, and define terms related to dental administration and communication skills. They will have an overview of how human relations play an important role when working and communicating with colleagues and patients. In addition, they will learn the communication methods used in dental setting, technology of dental practice, manage the financial aspects of a practice including inventory, and marketing their personal skills for lifelong learning. Students will demonstrate effective communication skills as part of their clinical performance; prepare a professional resume and practice appointment scheduling and insurance protocol on Dentrix. (Prerequisite CDA 110) **Clock Hours: Lec 10 cl hrs/ Lab 30 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
CDA 112	Externship (120 hours of clinical externship): Students are required to perform and finish clinical externship to complete the program. Clinical externship is the application of knowledge and skills students learned in the classroom. Students' externship consists of 4-8 consecutive weeks and 20- 40 hours per week with a total of 120 hours. Externship hours must begin the week after classroom lectures and laboratory work has been completed. Special circumstances must be cleared up with school. Students participating in externship and clinical training work are under the supervision of a qualified assigned preceptor, as determined by school faculty in participating sites, and under the general supervision of school director and externship site's supervisor. They are evaluated by supervisory personnel and evaluations are placed in the students' permanent records. Externship and clinical guidelines and requirements for each program may be obtained from the School Director. **Clock Hours: Lec 00 cl hrs/ Lab 00 cl hrs/ Ext 120 cl hrs/Total Clock Hours 120**

Comprehensive Medical Billing & Coding Specialist

Table 31: Synopsis of Comprehensive Medical Billing & Coding Specialist

Subject	Contents of Subject: Comprehensive Medical Coding and Billing Synopsis
CMBC-MAA 101	Students will learn about the typical job description for an entry-level medical assistant and will differentiate between scope of practice and standards of care for medical administrative assistants. They will also learn about professional medical assistance organizations. Discuss important factors about therapeutic communication across the life span. Recognize communication barriers. Will learn the teaching objectives and be introduced to the courses teaching materials. Learn the components of the Health Insurance Portability and Accountability Act (HIPAA). Prerequisites: None **Clock Hours: Lec 20 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CMBC-MAA 102	Students will compose professional business letters and emails. They will demonstrate professional telephone techniques and learn how to take triage phone calls and take messages. They will schedule patient appointments and register new patients. They will learn the administrative and clinical closing responsibilities performed by the medical assistant. Students will distinguish between an EHR and EMR. They will Identify the medical assistant's legal responsibilities in medication management in an ambulatory care setting. Prerequisites: MBC-MAA-101 **Clock Hours: Lec 10 cl hrs/ Lab 10 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**
CMBC-MAA 103	Discuss payment at the time of service and provide examples of displaying sensitivity when requesting payment at the time of service. Review policies and procedures for collecting outstanding balances on patient accounts. Describe types of adjustments made to patient accounts including insufficient funds checks. Understand the purpose of bank account reconciliation for auditing purposes. Prerequisites: MBC-MAA-102 **Clock Hours: Lec 08 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
CMBC-MAA 104	Describe patient safety factors in the medical office environment. Discuss the requirements for proper disposal of hazardous materials. Demonstrate telephone screening techniques and documentation guidelines for ambulatory care emergencies. List some common early mistakes of which a new employee should be aware. Discuss how to be an effective employee and how to deal with supervisors. Discuss how to pursue a raise and how to leave a job amicably. Prerequisites: MBC-MAA-103 **Clock Hours: Lec 08 cl hrs/ Lab 08 cl hrs/ Ext 00 cl hrs/Total Clock Hours 16**
CMBC-EHR 105	Become familiar with the content of a typical Electronic Health Record (EHR). Discuss ownership of the health record and who documents within the health record. Define practice management software and explain how it is used with the EHR system. Understand how to view and submit assignments in SimChart for the Medical Office. Create new patient records in SimChart for the Medical Office. Discuss access to

	protected health information, including who has legal access to patients' records and under what circumstances. Document allergies, enter medications, and patients' histories into the EHR. Post charges, payments, and adjustments to a patient ledger. Describe the three ways of storing Personal Health Record (PHR) data and outline the advantages and drawbacks of each. Prerequisites: None **Clock Hours: Lec 20 cl hrs/ Lab 20 cl hrs/ Ext 00 cl hrs/Total Clock Hours 40**
CMBC-EHR 106	Understand the derivation of healthcare terms. Use the rules given to build and spell healthcare terms and also change singular terms to their plural form. Recognize and use terms associated with positional and directional vocabulary. Recognize and use terms related to the anatomy and physiology of different body systems. Prerequisites: None **Clock Hours: Lec 80 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 80**
CMBC 107	Identify the structure and format of the ICD-10-CM, CPT and HCPCS. Describe how to use the Alphabetic Index and Tabular List. Explain how to abstract the diagnostic statement from a patient's health record. Select main terms, essential modifiers, and the appropriate code (or codes) and code ranges. Classify the six different sections of the CPT code set. Discuss special reports and explain the importance of modifiers in assigning CPT codes. Review various conventions in the CPT code set. Review coding guidelines to assign the most accurate code. Review medical coding ethical standards. Prerequisites: CMBC-101 **Clock Hours: Lec 70 cl hrs/ Lab 70 cl hrs/ Ext 00 cl hrs/Total Clock Hours 140**
CMBC 108	Discuss the purpose of health insurance and explain the health insurance contract between the patient and the health plan. Explain the importance of verifying eligibility and being able to verify eligibility of services. Identify steps for filing a third-party claim. Explain how to submit health insurance claims, including electronic claims to various third-party payers. Complete an insurance claim form. Differentiate between fraud and abuse. Discuss the effects of upcoding and down coding. Review and read an Explanation of Benefits. Describe the process for preauthorization and how to obtain preauthorization including documentation. List and discuss various government-sponsored plans. Prerequisites: CMBC-102 **Clock Hours: Lec 48 cl hrs/ Lab 40 cl hrs/ Ext 00 cl hrs/Total Clock Hours 88**
CMBC 109	Discuss traditional job search methods. Discuss the three types of resume formats and describe how to prepare a chronologic resume and cover letter. Discuss how to complete an online job application and various life skills needed in the workplace. Prerequisites: CMBC-103 **Clock Hours: Lec 06 cl hrs/ Lab 06 cl hrs/ Ext 00 cl hrs/Total Clock Hours 06**

Substation Technician Program

Table 32: Synopsis of Substation Technician Program

Subject	Contents of Subject: Comprehensive Medical Coding and Billing Synopsis
STP 101	This introductory section will demonstrate basic terms and introduce power delivery systems, math, and safety. This basis is crucial for a student's ability to join the work force as a skilled technician. Within this module, students will be introduced to the importance of electricity, history of power delivery and key agencies and organizations. A basic overview of electrical systems for generation, transmission, distribution, and substations will be provided. This section will also introduce safety for personnel and equipment, hazards, safety culture and accident reviews. The concept of rigging for safe handling will be introduced and practiced in practical lab environments. Each module of this course includes immersion with NESC, specific to the curriculum which is being developed in that module. Lab exercises included in this module will include tool identification, material identification, safety, situational awareness, and surroundings. Prerequisites: None **Clock Hours: Lec 80 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 80**
STP 102	The overview and equipment module will focus on a detailed overview of what substations are and equipment and components inside the substations Each piece of equipment and component will be explained in greater detail (breakers, disconnects and switches, conductors and bus, transformers, and instrument transformers). System functionality and implications will be introduced and explained. Students will become learned on the history, development, and practical applications of each component. Also, roles of each component will be presented and explained as also effects to the power delivery system. Safety in this module will center around safety meetings, public safety, communications, and accidents review. Labs will include spending time around the equipment and practically assessing major parts and their physical condition. This module is 6 weeks course. Prerequisites: STP-101 **Clock Hours: Lec 120 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 120**
STP 103	This module will concentrate on design and construction of substations. It will provide comprehensive overview of NESC and applications of it, design, and elements to consider prior to entering the industry and construction methods In this section students will be trained on different aspects and phases in design of the substations, requirements taken in consideration for location and type of substations to be built. Different types of substations will also be presented (Step-up, Step-down, Generation, switchyards). Differentiation per type (AIS vs GIS) will be presented and explained. Students will become educated on different construction methods for each part of construction process necessary (civil and grading, underground installation, steel installation, equipment installation, bus, and welding). Equipment usage will be explained for boom lifts, bucket trucks, excavators. Safety will accent protective

	arrangements in supply stations, rules for employees, grounding methods and rules during construction for equipment, and special conditions. Lab in this module will include practical installation of critical station components (steel structures, equipment, grounding). This module is 6 weeks course. Prerequisites: STP-102 **Clock Hours: Lec 60 cl hrs/ Lab 60 cl hrs/ Ext 00 cl hrs/Total Clock Hours 120**
STP 104	This module will concentrate on the substation as part of electrical system operations and all relevant factors for system function. Students will be introduced to substation communication systems for substation operations, communication systems, system automation, systems protection, and relays. System operations and requirements for equipment and personnel will be introduced. Substation special elements from a power quality perspective will be explained along with system protection systems (reporting and monitoring system reliability). Other elements of this module will include how safety audits, FR clothing and bloodborne pathogens affect personnel and surroundings, and the testing basics and procedures of transformers. Labs in this module will include video of system operations centers and lectures from system operators. Prerequisites: STP-103 **Clock Hours: Lec 30 cl hrs/ Lab 30 cl hrs/ Ext 00 cl hrs/Total Clock Hours 60**
STP 105	The final module will bring all previous modules together and offer perspective and insight into what electrical contractors are looking for and impacts on the electrical utility industry. This module will cover other related professions such as Commissioning & Testing, Safety, System Operators and Metering. The las module will also provide insight into what electrical contractors are expecting from future management positions and how individual productivity reflects on contractors' performance. The concept of tracking performance based on safety, productivity, and quality parameters will be covered. In addition, critical scheduling of outages will be presented and how that relates to contractor's performance. Emergency management for storm repairs or other catastrophic events will be explained along with how critically important precautions are, along with the role safety has in those situations. Labs in this module will consist of lectures from Industry experts with real life presentations and discussions. Prerequisites: STP-104 **Clock Hours: Lec 60 cl hrs/ Lab 00 cl hrs/ Ext 00 cl hrs/Total Clock Hours 60**

Comprehensive Patient Care Technician/Assistant

Table 33: Synopsis of Comprehensive Patient Care Technician/Assistant

Subject	Contents of Subject: Comprehensive Patient Care Technician/Assistant Synopsis
CPCT 101	Upon Completion of this course, the student will learn to: 1. Describe the types of patient specimen that are analyzed in the clinical laboratory 2. Describe the phlebotomist's role in collecting and/or transporting specimens to the laboratory

	3. Describe the components of a quality assurance (QA) program and identify areas in phlebotomy subject to quality control (QC) 4. Identify key elements of the Occupational Safety and Health Administration Bloodborne Pathogens Standard and the Needlestick Safety and Prevention Act 5. Identify hazards, warning symbols, safety rules and agencies with biological, chemical, electrical, fire and radiation safety and actions to take if hazardous incidents occur 6. Distinguish between the different types of blood vessels and blood components and describe the structure and its functions 7. Name and locate major arm and leg veins and evaluate the suitability of each vein for venipuncture 8. Demonstrate knowledge of collection equipment, types of additives used, special precautions necessary and substances that can interfere in analysis of blood constituents 9. Identify the various types of additives used in blood collection and explain the reasons for their use 10. Identify the evacuated tube color codes associated with the additives 11. Check and review the requisition for testing requirements 12. Describe the proper order of draw for blood collection 13. Demonstrate how to perform venipuncture using evacuated tube system (ETS), syringe and winged infusion set or butterfly and identify the potentials sites for venipuncture and capillary (dermal) puncture 14. Identify the challenges in venipuncture procedures and identify and report potential preanalytical errors Prerequisites: 1. Immunization Record 2. Proof of education such as High School Diploma or GED 4. Two (2) valid Identifications (ID's) 3. The payment of registration fee and arrangements to pay tuition. 4. Signed admissions application and signed enrollment agreement Instructional Methods: Lecture and Hands-on procedures **Clock Hours: Lec 48 cl hrs/ Lab 24 cl hrs/ Ext 00 cl hrs/Total Clock Hours 72**
CPCT 102	Upon Completion of this course, the student will learn to: 1. Increase familiarity and comfort in using the common medical terms. 2. Correctly spell, pronounce, define and identify words 3. Properly use medical terms and abbreviations correctly in written assignments 4. Provide the complete meaning of a medical abbreviation 5. Correctly construct singular and plural form of medical terms using root words, affix, and suffixes Prerequisites: None Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 16 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 28**
CPCT 103	Upon Completion of this course, the student will learn to: 1. Perform Electrocardiography

	2. Understand the electrical conduction system of the heart 3. Identify and apply the correct lead placement 4. Identify abnormal heart rhythms 5. Interpret an ECG strip 6. Identify the typical ECG Rhythm abnormalities 7. Identify the different types of artifacts, causes and methods for resolution Prerequisites: None Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 60 cl hrs/ Lab 24 cl hrs/ Ext 00 cl hrs/Total Clock Hours 84**
CPCT 104	Upon Completion of this course, the student will learn to: 1. Identify the trends in today's health care system and its components 2. Describe the role of the Patient Care Technician in the health care environment 3. Describe the complex factors involved in the delivery of patient care 4. Understand the Affordable Care Act 5. Define the types of healthcare delivery systems 6. Understand Maslow's Hierarchy (Model of Health and Illness) 7. Outline Patients' and Healthcare Providers' Rights 8. Distinguish the difference between the Certified Nursing Assistant and the Patient Care Technician 9. Detail the Scope of Practice of a Patient Care Technician 10. Outline the characteristics of Professionalism and understand the concept of Work Ethics, Legal and Principles of Ethics 11. Demonstrate the concepts of verbal and non-verbal communication and identify the various factors that have the potential to affect the communication 12. Recognize assertive communication as the most appropriate communication style 13. Operate Electronic Health and Medical Records and understand protected and confidential information 14. Demonstrate basic guidelines for documentation/charting 15. Understand patient as a person and provide the highest quality of care regardless of race, ethnicity, religious beliefs and cultural background 16. Recognize the different body structures and functions 17. Describe the pattern and stages of growth and development 18. Define the nature, types and how to control pain 19. Describe the physiology, sleep cycle and the signs and symptoms of sleep deprivation Prerequisites: None Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 24 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 28**
CPCT 105	Upon Completion of this course, the student will learn to: 1. Define and understand infection cycle. Identify potential routes of infection, mode of transmission of pathogens

	2. Understand standard precautions and demonstrate proper aseptic hand washing technique, donning and doffing personal protective equipment such as gloves, mask, gown, goggles 3. Understand the principles of sterile technique and demonstrate Surgical Asepsis 4. Understand why Occupational Safety and Health Hazard Administration (OSHA) is important to workers/employees and employees' rights under OSHA 5. Demonstrate appropriate body mechanics to techniques for turning, moving, lifting and carrying a patient 6. Identify the importance of correct patient positioning and understand the purposes of proper positioning 7. Demonstrate safe, comfortable, and appropriate positioning for clients in bed 8. Differentiate between active and passive range of motion 9. Demonstrate the ability to perform passive range-of-motion exercises, to assists patient in active range-of-motion exercises, and to perform combinations of passive and active range-of-motion exercises 10. Assist patient during medical emergencies 11. Identify safety precautions that help to prevent falls 12. Define and demonstrate proper procedures in taking vital signs 13. Demonstrate the equipment used to measure vital signs 14. Identify normal ranges for vital signs Prerequisites: PCT 104 – Introduction to Healthcare/Role of Patient Care Technician/Professionalism & Work Ethics/ Communication/Understanding the Patient & Patient Rights/ Ethics & Laws/Body Structure & Function/Growth & Development/Pain Management, Comfort, Rest and Sleep Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 16 cl hrs/ Lab 12 cl hrs/ Ext 00 cl hrs/Total Clock Hours 28**
CPCT 106	Upon Completion of this course, the student will learn to: 1. Assist patients/residents on admission, discharge or transferring 2. Learn and demonstrate medical documentation such as how to write out notes in a patient's chart, along with other common formats 3. Recognize opportunities for documentation 4. Assist patients/residents in activities of daily living including dressing and undressing patients/residents 5. Demonstrate the proper procedure in bedmaking 6. Identify the role of the patient care technician in promoting nutrition and describe the different therapeutic diets 7. Assist patients/residents in urinary and bowel elimination and monitor intake and output 8. Demonstrate administering enema and ostomy care

	Prerequisites: PCT 105 – Asepsis and Infection Control/ Workplace Safety and Body Mechanics/ Patient Safety/ Moving, Positioning and Preventing Falls/Basic Emergency Care/Assisting with the Physical Examination/Vital Signs taking Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 08 cl hrs/ Lab 16 cl hrs/ Ext 00 cl hrs/Total Clock Hours 24**
CPCT 107	Upon Completion of this course, the student will learn to: 1. Define sterilization and assist patient on surgical procedures, perform skin prep and provide post-op care 2. Identify phases of wound healing 3. Demonstrate surgical wound dressings 4. Identify signs and symptoms of an infected wound, wound classification, types of wound drainage and stages of wound healing 5. Define heat and cold therapy 6. Monitor patient's skin care practices, noting type of soap or other cleansing agents used, temperature of water and frequency of skin cleansing 7. Differentiate Rehabilitative and Restorative Care 8. Define the goals of rehabilitation, issues in rehabilitation and outline the chronic conditions that requires rehabilitation therapy 9. Understand disability and injuries 10. Identify and prevent the risks factors in developing pressure sores 11. Identify the categories/stages of pressure ulcer 12. Manage pressure sores 13. Identify the common sites for development of pressure sores Prerequisites: PCT06 – Admissions & Discharge/ Bedmaking & Hygiene/ Assisting with Grooming/ Assisting with Nutrition & Fluids/ Assisting with Urinary Elimination/ Assisting with Bowel Elimination/Oxygen Needs Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 12 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 16**
CPCT 108	Upon Completion of this course, the student will learn to: 1. Describe the anatomy and physiology of female reproductive system and its functions 2. Outline the body changes women experience during pregnancy and the stages of pregnancy, childbirth, and postpartum 3. Describe characteristics and care of newborns 4. Differentiate well and sick child visits. Define the role of the patient care technician in assisting the newborn during examination 5. Recognize prevention of injury and child abuse 6. Outline the role of the Patient Care Technician in caring for the older adult 7. Describe changes in major body systems of older adult 8. Outline the role of Patient Care Technician in caring for patients with Mental Health Needs 9. Define addiction such as alcohol abuse and alcoholism. Describe the symptoms of withdrawal syndrome

	10. Demonstrate how to take care of patients with Chronic conditions such as cerebrovascular accident, cardiac conditions; patients with chronic immunologic & oncologic disorders, breast cancer, acquired immunodeficiency syndrome and other conditions. 11. Describe the difference between palliative and curative care 12. Outline the criteria for admission to hospice 13. Define Interdisciplinary Team 14. Demonstrate how to take care of and communicate with the dying patient. Understand the ethics in Hospice care and implement postmortem care. Prerequisites: PCT07 – Care of the Surgical Patient/ Heat and Cold Applications/ Care of Wounds and Pressure Ulcers/ Rehabilitative and Restorative Care Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 08 cl hrs/ Lab 04 cl hrs/ Ext 00 cl hrs/Total Clock Hours 12**
CPCT 109	Upon Completion of this course, the student will learn to: 1. Understand therapeutic Modalities, Cryotherapy, Fluidotherapy, Hydrotherapy, massage therapy and applicable techniques 2. Demonstrate equipment used in physical therapy 3. Describe the concept of rehabilitation therapy 4. Identify the physical or rehabilitation therapeutic modalities 5. Understand the goal of patient care in relation to physical therapy for residents or patients 6. Demonstrate proper patient care approach 7. Demonstrate patient care skills 8. Understand regulatory compliance relating to long term care facilities 9. Identify the types of healthcare facilities and varying levels of care 10. Demonstrate the ability to move a partially or totally immobile client/patient/resident safely from bed to chair and back; safely up in bed or to the side of the bed; to a wheeled stretcher and back to bed; from wheelchair to chair or from chair back to wheelchair; from sitting to standing position or from standing to sitting position 11. Demonstrate the ability to position a client/patient/resident safely while transferring 12. Demonstrate the ability to teach each of the crutch-walking gaits to a client. Practice each gait 13. Demonstrate and practice going up and down stairs with crutches and/or a handrail 14. Differentiate between client reminder devices for safety and for medical therapeutic reasons 15. Describe the evaluation of fall risk and how this applies to nursing care and client safety 16. Understand how to protect and support an injury 17. Understand that orthopedic appliances or apparatuses used to support, align, prevent, or correct deformities or to improve function of movable parts of the body

	18. Assists patient with prosthesis Prerequisites: None Instructional Methods: Lecture and Laboratory **Clock Hours: Lec 50 cl hrs/ Lab 50 cl hrs/ Ext 00 cl hrs/Total Clock Hours 100**
CPCT 110	Upon Completion of this course, the student will learn to: 1. Write an impressive cover letter and resume 2. Execute the basic soft skills to communicate, shake hands, portray a positive personal appearance, and interview etiquette 3. Describe the characteristics being professional, resolve conflict in the workplace and engage in proper communication among colleagues, patients, clients or residents 4. Describe the proper use of computers, electronic devices, and cell phones during work hours 5. Define ethics and maintaining a positive attitude in the workplace - including giving and receiving feedback 6. Understand the proper execution of organizational skills and office protocols 7. Describe characteristics of leadership 8. Promote camaraderie in the workplace 9. Gain the knowledge and confidence to compliment the individual/student's career 10. Earn 10 continuing education credits to maintain current certifications Prerequisites: None Instructional Methods: Lecture **Clock Hours: Lec 12 cl hrs/ Lab 08 cl hrs/ Ext 00 cl hrs/Total Clock Hours 20**

Residential Wireman Program

Table 34: Synopsis of Residential Wireman Program

Subject	Contents of Subject – Residential Wireman Training Program Synopsis
RW 101	SAFETY AND THEORY – Residential workplace safety. Electrical hazards associated with electrical work, purpose of NFPA 70E Standard for Electrical Safety in the workplace, purpose of OSHA and its examples that apply to various general and electrical safety hazards associated with residential wiring, personal protective used by residential electricians, several safety practices pertaining to general and electrical safety, safety data sheet (SDS) and various classes of fires, types of extinguishers used and the fire triangle. Prerequisite: None Clock Hours: Lecture 20 hours/ Lab 00 hours/ Total Hours 20
RW 102	PREPARING AND PLANNING A RESIDENTIAL WIRING JOB – This module is designed to show students how to apply common safety practices; how to use materials, tools and testing instruments; and how to read and understand residential building plans.

	Determine the requirements for branch circuits, feeder circuits and service entrances are also covered in this module. Prerequisite: RW 101 – Safety and Theory Clock Hours: Lecture 10 hours/ Lab 10 hours/ Total 20 hours
RW 103	SERVICE ENTRANCES & EQUIPMENT AND RESIDENTIAL ELECTRICAL SYSTEM ROUGH-IN The content includes material on how to install the necessary equipment to get electrical power from the electric utility to the dwelling unit and demonstration on how to install electrical boxes and run cable or raceway according to the electrical circuit requirements. Selection of appropriate wiring methods, conductor types and electrical boxes for a residential electrical system rough-in, demonstration of NEC general requirements for the following: residential rough-in wiring, for wiring methods used in residential rough-in wiring and for conductors used in residential rough in wiring. Prerequisite: Preparing and Planning a Residential Wiring Job Clock Hours: Lecture 20 hours/ Lab 30 hours/ Total 50 hours
RW 104	RESIDENTIAL ELECTRICAL SYSTEM TRIM-OUT – Installation of all the switches, receptacles and luminaires (lighting fixtures) throughout the house. Students will learn common lamp and lighting fixture terminology and the four different lamp types used in residential wiring applications: incandescent, LED, fluorescent and high-intensity discharge, selecting a lighting fixture for a specific residential living area, installation of common residential lighting fixtures. Installation of ceiling-suspended paddle pans are also covered and demonstrated in this subject. Prerequisite: Service Entrances & Equipment and Residential Electrical System Rough-In Clock Hours: Lecture 20 hours/ Lab 30 hours/Total 50 hours
RW 105	MAINTAINING AND TROUBLESHOOTING A RESIDENTIAL ELECTRICAL WIRING SYSTEM - Explains how to test each circuit to make sure they are installed according to NEC requirements and are in proper working order. The contents also show how to troubleshoot and correct problems to ensure a satisfied customer. The module also covers the material that every electrician should know so that the home they are wiring has the most up-to-date and efficient green electrical system possible. Prerequisite: Residential Electrical System Trim-Out Clock Hours: Lecture 10 hours/ Lab 10/ Total 20 hours

SEMINARS OFFERED

CMA Re-Certification (801) – Meaningful Use Initiative Seminar

Seminar Fees and Charges

Seminar Fee is $505.00, and includes study materials such as: Printed Study Guide, Online Practice Test, and NHA Certification Exam

Admission Requirements:

Minimum Age: Eighteen (18) years old
Completion of a CMA program or one (1) year work experience
Specific Entrance Requirements: All documentations written in foreign languages other than English must be translated into English, Notarized, and approved by School personnel prior to registration.
Two valid forms of Government Issued Identification (one must have a photo);
A letter of work experience must be endorsed by their employer
Proof of CMA program completion
Prospective students must pick up the study guide and online practice test one week before the seminar

Seminar Description:

This seminar addresses the Meaningful Use Initiative requirements to credential uncertified medical assistants. Clinical Medical Assistants currently working without an active certification may complete the seminar to gain recertification. This seminar consists of eight hours of classroom instruction that will cover over five hours of NHA study materials, and the NHA national CCMA examination.

Course Overview:

The Center for Medicare and Medicaid Services (CMS) rules established in 2012, state credentialed medical assistants can enter orders into the medical record for the computerized provider order entry Computerized Provider Order Entry, (CPOE). A process previously limited to licensed healthcare professionals. Performing this task means, medical assistant students who become credentialed can offer tremendous workflow efficiency and compliance benefits to their employers.

How does Meaningful Use impact medical assistant programs?

The ruling could position your institution to serve as a valuable partner in delivering credentialing resources to providers who are required to certify their medical assistants, as well as to provide credentialed medical assistants to employers going forward. The seminars will potentially result in heightened institution and program credibility and valuable partnership with local providers, translating to increased student placement rates.

Table 35: CMA RE-CERTIFICATION (801) SEMINAR OUTLINE

Subject	Subject Title	Monday, Tuesday, and Wednesday	Clock Hours Lec/Exam/Total		
Chapters 1-2	Health Care Systems and Settings and Medical Terminology	4 Clock Hours	02	02	04
Chapters 3-4	Basic Pharmacology and Nutrition	4 Clock Hours	02	02	04
Chapters 5-6	Psychology and Anatomy and Physiology	4 Clock Hours	02	02	04
Chapters 7-8	Pathophysiology and Disease Processes and Microbiology	4 Clock Hours	02	02	04
Chapters 9-10	Clinical Patient Care: General Patient Care and Infection Control	4 Clock Hours	02	02	04
Chapters 11-12	Testing and Laboratory Procedures and Phlebotomy	4 Clock Hours	02	02	04
Chapters 13-14	EKG and Cardiovascular Testing and Patient Coordination and Education	4 Clock Hours	02	02	04

Chapters 15-16	Administrative Assisting and Communication and Customer Service	4 Clock Hours	02	02	04
Chapter 17	Medical Law and Ethics	4 Clock Hours	02	02	04
Total Clock Hours					

Table 36: CMA RECERTIFICATION SYNOPSIS

Subject	CMA Recertification
Chapters 1-2	These chapters will outline the fundamental knowledge and basic science: The Health Care Systems and Settings: ● Role and responsibilities of the medical assistant, other health care providers, and allied health personnel ● Scope pf practice ● Titles and credentials ● Licensing and certification ● Healthcare delivery models (HMOs, PPOs, POS, PCMH, accountable care organizations [ACOs]/payment for performance, hospice, collaborative care model) ● General vs. specialties and services offered ● Ancillary services, alternative therapies ● Insurance fundamentals ● Medical Terminology: ● Common abbreviations, acronyms, and symbols ● Conditions, procedures, and instruments ● Medical word building (prefixes, suffixes, plurals) ● Positional and directional terminology
Chapters 3-4	The chapters will focus on the following: Basic Pharmacology: ● Commonly prescribed medications and common approved abbreviations ● Drug classifications and schedules ● Side effects, adverse effects, indications, and contraindications ● Measurement (for metric and household systems), mathematical conversions, and dosage calculations ● Forms of medication (pill, capsule, ointment) ● Look-alike/sound-alike medications ● Routes of administration ● Pharmacokinetics (absorption, distribution, metabolism, excretion) ● Rights of drugs/medication administration ● Physicians' Desk Reference and online resources ● Principles of storage and disposal Nutrition ● Dietary nutrients ● Dietary needs and patient education (general and related to diseases/conditions)

	● Vitamins and supplements ● Eating disorders ● Food labels
Chapters 5-6	These chapters will cover the following: ● Psychology: ● Developmental stages ● End of life and stages grief ● Psychology of the physically disabled, developmentally delayed, and people who have diseases ● Environment and socioeconomic stressors ● Mental health screening ● Defense mechanisms Anatomy and Physiology ● Anatomical structures, locations, and positions ● Structure and function of major body systems, including organs and their locations ● Interactions between organ system, homeostasis
Chapters 7-8	These chapters will cover the following: Pathophysiology and Disease Processes: ● Infectious agents, chain of infection and conditions for growth. Common pathogens and nonpathogens, cell structure (nucleus, cytoplasm, cell membrane, ribosomes, etc.) ● Diseases: ● Etiology, signs and symptoms, incidence, prevalence and risk factors, diagnostic measures and treatment modalities ● Epidemics and pandemics
Chapters 9-10	These chapters concern with Clinical Patient Care which comprises of the following: General Patient Care ● To complete by obtaining the following: ○ Greeting and identification of patient. Prepare examination room. Complete a comprehensive checking in patient including the purpose of the visit. ○ Measure vital signs and obtain anthropometric measurements. Report abnormal findings. ○ Prepare patient for procedures. Assist provider with general physical exams and/or during specialty examinations. Consent requirements. ○ Review provider's discharge instructions/plan of care with patients. Provide patient education pre- and post-op procedure ● Prepare and administer medications (parenteral or no parenteral route, eye, ear and topical) excluding IV administrations. Dosage calculations related to oral and injectable medications. Rights of medication administration.

	Immunization schedules and requirements. Techniques and injection site. Allergies (drug, food, latex, rubber, etc.). Perform eye and ear irrigation ● Administer First Aid measures and perform CPR, Basic Life Support and AED ● Complete documentation: Document and operate basic functions of an EMR system and enter orders into Computerized physician order entry (CPOE). ● Positioning and draping requirements for general and specialty examinations, procedures and treatments ● Check equipment and supplies in the medical office ● Sterile techniques ● Sutures: types and removal. ● Referral authorizations; insurance authorizations. ● Electronic prescribing software, transmission of prescriptions and required components of medical records. Infection Control: ● Adhere to regulations and guidelines related to: Perform the following: ○ Infection Control, hand hygiene (universal precautions), PPE, disinfection/sanitization, sterilization of medical equipment, aseptic techniques for various clinical situations. ○ Dispose of biohazardous materials as mandated by OSHA (sharps containers, red bags). Safety Data Sheets (SDSs); Cautions related to chemicals and disposal method. Exposure Control plan. ○ Infectious agents: modes of transmission, precautions for blood-borne pathogens
Chapters 11-12	In these chapters, proper Venipuncture, Testing and Laboratory procedures will be discussed. Testing and laboratory procedures: ● Collect nonblood specimens (urine, stool, semen, cultures and sputum): Point-of-care-testing. Specimen collection techniques and requirements. Report abnormal laboratory test results. Controls/calibration/quality control ● Perform CLIA-waived testing (labs) and regulations ● Perform vision and hearing tests. Elements related to vision (color, acuity, distance, visual fields) and hearing tests (tone, speech and word recognition) ● Perform allergy testing. Common allergens. Scratch test and intradermal allergy test ● Perform pulmonary function test ● Match and label specimen to patient and completed requisition ● Process, handle and transport collected specimen. Requirements for transportation, diagnosis, storage and disposal of specimens (patient identifiers, site, test) Phlebotomy ● Technique for drawing blood, both by venipunctures and by the capillary method of collection. It also explains how to identify patient complications,

	follow the order of drawing, perform special collections (timed specimens, drug levels, blood cultures, fasting), properly label and process specimens. Equipment calibration ● Tube additives and preservatives ● Requirements for transportation, diagnosis, storage and disposal ● Storage conditions related to sensitivity to light and temperature
Chapters 13-14	These chapters explain the following: EKG and Cardiovascular testing ● Perform EKG/ECG tests, ensure proper functioning of EKG equipment, recognize abnormal EKG results and respond to dysrhythmia, identify artifacts, verify paper speed sensitivity, maintain EKG equipment, record EKGs. Placement of limb and precordial lead electrodes ● Assist provider with noninvasive cardiovascular profiling (stress test, Holter monitoring) and transmit results to patient's EMR or paper chart and provider Patient Care Coordination and Education ● Collaborate and assist providers in coordinating care with agencies for clinical and nonclinical services. ● Reinforce patient compliance and provider's instructions ● Referral forms and processes ● Roles and responsibilities of team members involved in patient-centered medical home
Chapters 15-16	These chapters highlight the following: Administrative Assisting ● Appointment Scheduling ● Verify the following: ○ Insurance coverage/financial eligibility ○ Diagnostic and procedural codes ○ Prior authorizations and pre certifications ● Telephone and E-mail Etiquette. Provide customer service and facilitate service recovery (follow-up patient calls, monitoring patient flow sheets, collecting on accounts) ● Enter information into databases or spreadsheets (EHR, EMR, billing modules, scheduling systems) ● CMS billing requirements ● Auditing methods, processes and signoffs Communication and Customer Service ● Understand verbal and nonverbal communication with diverse patients/audiences, providers, coworkers, caregivers, pediatrics, geriatrics, patient with hearing and vision loss, mental handicap and disability ● Clarify and relay messages between patients and providers ● Facilitate and promote teamwork among health team members

	• Proper use of medical terminologies and jargon, layman's terms • Provide therapeutic communication. Difference between open and closed-ended questions • Techniques to deal with patients (irate clients, custody issues between parents, chain of command)

Chapter 17	This chapter will focus on the concepts of.
	Medical Law and Ethics
	• Adhere to the following:
	  ○ Professional codes of ethics
	  ○ Legal requirements regarding reportable violations or incidents
	• Protect patient's privacy and confidentiality including medical records
	• Identify personal or religious beliefs and values and provide unbiased care
	• Informed consent, advance directives (living will, DNR/DNI), power of attorney
	• Conditions for sharing information/release of information
	
	Criminal and civil acts and medical malpractice
	Mandatory reporting laws, grounds for reporting and reporting agencies

	NHA CCMA Certification Exam – After completion of this seminar, student will be given a specific date of when to take the National Healthcare Association (NHA) Exam.

EKG Technician Seminar

Seminar Fees and Charges

Seminar $675.00, Book $120.00, Navy blue scrub suit uniform, National Certification Examination $117.00, Study Guide and Online Practice Exam, $69 = Totaling $1,021.00

Admission Requirements:

a) Minimum Age: Eighteen (18) years old
b) Proof of prior completion of any medical training or one year work related experience (a letter of endorsement from employer is required)
c) Prospective students must pick up the book, study guide and online practice exam one week before the seminar starts. After completion of the seminar, student must register at www.nhanow.com to take the Certified EKG Technician (CET) national examination.

Seminar Description:

A 60 hour seminar presents the principles of EKG monitoring associated with patient care. Each chapter presents learning objectives, enabling the students to focus attention on specific areas needing improvement. After completion of this seminar students will be able to perform the following:

The EKG Monitoring

a) Calculate a patient's heart rate from the EKG tracing (e.g., 6-seconds methods, R to R, sequencing)
b) Identify artifacts from the tracing (e.g., wondering baseline, somatic, electrical)
c) Resolve artifacts from the tracing (e.g., wondering baseline, somatic electrical)
d) Record and EKG on a patient

e) 3-lead
f) 5-lead
g) 12-lead
h) Verify the leads recorded on an EKG
i) Upload a completed EKG to a patient electronic medical record
j) Mount a competed EKG for a patient chart
k) Measure a patient's heart rhythm from the EKG tracing
l) Inspect the waveforms of a cardiac cycle for symmetry, direction, and amplitude (e.g., P waves, QRS complexes, St Segments, T waves)
m) Measure a patient's heart conduction from the EKG tracing (e.g., PR-intervals (PRI), QRS duration, QT-interval)
n) Identify the major classifications of arrhythmias from the EKG tracing (e.g., sinus, atrial, ventricular, and junctional)
o) Identify the major variances to waveforms related to ischemia, injury, or infarction.
p) Respond to potentially life-threatening arrhythmias
q) Verify EKG machine paper speed (e.g., 25 mm/second, 50mm/second.
r) Verify EKG machine sensitivity (e.g., h, 1, 2)
s) Maintain EKG equipment and the work environment
t) Recognize pacemaker spikes on an EKG trace

Patient Care

a) Prepare the Patient
1) EKG monitoring (e.g., patient history, cardiac medications, patient positioning)
2) Holter monitoring
3) Stress testing
4) Telemetry monitoring

b) Apply Electrodes on Patient
1) EKG
2) Holter monitoring
3) Stress testing
4) Telemetry
5) Pediatric patient
6) Patient with special Considerations (e.g., right sided heart, posterior chest, amputations)
7) Respond to sign and symptoms of cardiopulmonary compromise
8) Adhere to HIPAA regulations regarding Protected Health Information
9) Monitor patient condition during stress testing
10) Respond to complications during stress testing
11) Verify patient understanding of Holter monitor procedures
12) Obtain patient vital signs (e.g., heart rate, respirations, temperature, blood pressure, and pulse oximetry

Case Studies

a) Stress Test
b) 12-Lead EKG

c) Holter Monitor

Seminar Overview:

EKG rhythms provide important data for the diagnosis of heart conditions. As a Certified EKG Technician (CET), you'll have the credentials nearly all healthcare employers require to perform the critical tasks of administering EKGs, as well as Holter monitoring and stress testing. These tests can be performed during physical exams, when cardiovascular problems are suspected, or in preparation for surgery.

By administering EKGs — testing the electrical activity of the heart through small electrode patches attached to the body — you'll be making a life-changing difference by helping people of all ages prevent and treat heart disease.

The need for qualified EKG technicians continues to rise as the aging population in America grows (and with it, the prevalence of heart-related conditions). Earning your CET will help you launch a successful and meaningful career that can help make a difference in countless lives. Whether you seek full-time or part-time employment, the opportunities in this profession are flexible and in high demand. Plus, the added skills of Holter monitoring and stress tests required for the Certified EKG Technician (CET) will help you to be even more competitive as you launch your healthcare career.

Table 37: EKG SEMINAR OUTLINE

Subject	Subject Title	Class Schedule	Clock Hours Lec/Exam/Total		
Chapters 1	EKG Monitoring	1st to 6th Day Mon, Wed, Fri 5:30 -9:30 pm	12	12	24
Chapters 2	Patient Care	7th to 12th Day Mon, Wed, Fri 5:30 -9:30 pm	12	12	24
Chapters 3	Case Study, Review, and the national Certified EKG Technician (CPT) Exam	13th 15th Day Mon, Wed, Fri 5:30 -9:30 pm	12	12	24
Total Clock Hours			30	30	60

Table 12: EKG SEMINAR SUBJECT CONTENT

Subject	EKG Technician Seminar
Chapters 1	EKG Monitoring – This chapter provides the information necessary to systematically approach the EKG and interpret arrhythmias encountered in the clinical setting. In addition, the chapter includes pictures and EKG tracings to promote rhythm recognition. Important terms are located at the end of the chapter in a special section, enabling students to locate definitions quickly. This chapter concludes with a 10-question self-assessment drill. Students will be able to: Describe proper lead placement when acquiring various EKG tracings List the EKG waveforms Identify specific waveforms on the EKG

	Measure the duration of waveforms on the EKG Identify the direction of wave deflection, and determine T and P waves' symmetry Measure the heart rate from the EKG tracing Differentiate artifact from expected EKG tracing waveforms Describe how to eliminate artifact from an EKG Interpret arrhythmias originating in atria, ventricles, and accessory pathways Recognize pacing spikes on the EKG Identify changes on the EKG Describe the proper response for life-threatening arrhythmias Describe how to maintain the EKG machine 24 Hours Classroom Review
Chapters 2	Patient Care – This chapter presents the necessary information an EKG Technician needs to educate patients on various procedures involving the EKG. This also presents techniques for acquiring a patient's medical, surgical, social, and medication history. Provides brief overview of HIPAA regulations as they pertain to protected health information, and review expected reference range vital signs across the lifespan. Student will be able: Obtain the patient's social, medical, surgical, and medication history Educate patients about the EKG, Holter monitoring, stress testing, and telemetry Properly apply EKG electrodes to acquire a 3-, 5-, and 12-lead EKG and Holter monitor Discuss modifications to EKG lead placement in pediatric patients, right-sided EKG, and patients who have limb amputations Discuss the signs and symptoms of cardiopulmonary distress Discuss the Health Insurance Portability and Accountability Act (HIPAA) and protected health information (PHI) Monitor a patient's condition during stress testing Respond to complications during stress testing List the range of vital-sign parameters for different age group 24 Hours Classroom Review
Chapters 3	Case Study and Review for NHA Exam – Student will study the: Stress Test, 12-Lead EKG, and Holter Monitor. Review and test the national certification to become a Certified EKG Technician (CET). Critical thinking: Review techniques and strategies on answering questions with rationale. The exam consists of 110 multiple-choice questions, with 100 of those items being scored. Students are allotted 110 minutes to complete the exam via computer. Students must have a scaled score of 390 out 500 to pass the exam. 12 Hours Class Review and NHA Examination

Phlebotomy Technician Seminar

Seminar Fees and Charges

Seminar $650.00, Book $115.00, National Certification Examination $117.00, Study Guide and Online Practice Exam, $69 = Totaling $991.00

Admission Requirements

a) Minimum Age: Eighteen (18) years old
b) Proof of a prior medical education of any kind or one year work related experience (a letter of endorsement from employer is required)
c) 2 Forms of Government IDs
d) BLS (Basic Life Support)
e) Royal Blue Scrubs
f) Prospective students must pick up the book, study guide and online practice exam one week before the seminar starts. After completion of the seminar, student must register at www.nhanow.com to take the Certified Phlebotomy Technician (CPT) national examination.

Seminar Description

The intent for this seminar is for students to take and/or pass the national certification. After completion of this seminar, students will be eligible to take the national certification to become Certified Phlebotomy Technician (CPT). This seminar consists of lectures and completes at least 40-45 live venipunctures (blood drawn) and capillary (finger) sticks, and can be completed within three weeks, 4 hours per day, from 1:00pm to 5:00pm, the break will be at: 1st Break 2:30pm – 2:40pm and the 2nd Break will be at 3:50pm – 4:00pm.

Seminar Overview:

This exemplary seminar is to fill the employment needs of clinical laboratories, provide high quality training for a diverse student population and to prepare them for traditional and emerging roles as Certified Phlebotomist Technicians. The student will be trained to perform a variety of blood collection methods using proper techniques and precautions including vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults. Emphasis will also be placed on infection prevention, proper patient identification, proper labeling of specimens, and quality assurance.

This seminar can lead to an additional employment opportunity advancing in the health care field. On the last day of the seminar, students will then take the CPT exam that consists of 110 multiple-choice questions, with 100 of those items being scored. Students are allotted 110 minutes to complete the exam via computer.

Table 39: PHLEBOTOMY SEMINAR OUTLINE

Subject	Subject Title	Class Schedule	Clock Hours Lec/Exam/Total		
Chapter 1	Introduction and Patient Preparation	1st Day Mon, Wed, Fri 1:00-5:00 pm	04	00	04
Chapter 2	Collection Techniques	2nd-3rd Day Mon, Wed, Fri 1:00-5:00 pm	04	04	08

Chapter 3	Processing	4th-5th Day Mon, Wed, Fri 1:00-5:00 pm	04	04	08
Chapter 4	Safety and Compliance Consideration	6^{th} -7^{th} Day Mon, Wed, Fri 1:00-5:00 pm	04	04	08
Live Venipuncture Sticks	30-45 live venipunctures (blood drawn) and capillary (finger) sticks. (using vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults)	8^{th} Day	00	04	04
NHA Exam	Review and National Certified Phlebotomy Technician (CPT) Examination	9^{th} Day	00	04	04
Total Clock Hours			16	20	36

Table 40: PHLEBOTOMY TECHNICIAN SEMINAR OUTLINE

Subject	Phlebotomy Technician Seminar
Chapters 1	Patient Preparation – This chapter provides an understanding of the basic patient preparation necessary prior to performing phlebotomy procedures. *04 Hours Classroom Review*
Chapters 2	Collection Techniques – This chapter is split into two sections: *primary collections* and *special collections*. The *primary collections* section prepares you for basic blood collection through venipuncture and dermal punctures of the finger or heel. Students will learn the proper techniques for safety and correctly obtain quality specimens from patients who need testing performed. Accurately collecting specimens helps physicians and nurses provide the best care for the patients. The *special collection* section reviews when CPT needs to collect special types of specimens to meet patient needs. This section also reviews, the most common special collection practices, prepares safely, and appropriately collect and process the specimens. *08 Hours Classroom Review*
Chapters 3	Processing - This chapter will list and describe the many tasks of processing patient specimens after collection. After proper collection, careful handling and processing are the most important steps to ensure that the test results are timely and accurate and serve the best interest of the patient. *08 Hours Classroom Review*
Chapters 4	Safety and Compliance Considerations – Goes over important safety and compliance guidelines to keep in mind when working with patients, their protected health information, and potentially infectious materials. CPTs must learn to work safely, protecting the health and safety of their patients, as well as themselves and fellow health care workers. They must follow laws and regulations in place to protect patients' privacy and security of patient's information, and to remain ready to assist when patient emergencies arise. *08 Hours Classroom Review*
Live Venipuncture Sticks	Live Venipuncture Sticks – Students must perform 30-45 live venipunctures (blood drawn) and capillary (finger) sticks, using vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults). *04 Hours Specimens Collection*

NHA Exam	Review and NHA Exam – Student will take the CPT exam that consists of 110 multiple-choice questions, with 100 of those items being scored. Students are allotted 110 minutes to complete the exam via computer. Students must have a scaled score of 390 out 500 to pass the exam. *04 Hours NHA Examination*

GRADING AND MARKING SYSTEM USED

The Training Center of Central Texas uses the following percentage grading system:

a) A = 90-100%
b) B = 80-89%
c) C = 70-79%
d) Below 70% is unsatisfactory

Every student's Final GPA is calculated as follows:

a) Quizzes 15%
b) Homework/Assignment 10%
c) Lab/Clinical 20%
d) Unit Test 25%
e) Final Exam 30%

Students will be tested on these categories: Quizzes and Lab/Clinical, Homework/Assignments, Unit Test, and the Final Exam. These categories will be calculated to determine the Satisfactory Progress and Grade Point Averages (GPA). Students will also be evaluated in the areas of attendance, theory grades and skill assessments.

The Lab/Clinical portion is evaluated by:

a) Timely completion
b) Ability to achieve accurate results
c) Clinical Site Supervisor evaluation to include promptness, personal hygiene and appearance and attitude.

Externship Ratings are: Exemplary (100%), Satisfactory (80%) or Poor (60%) which results in ineligibility to graduate. Two main components of Externship Ratings are: Attendance and Proctor Assessment. There are some categories proctors consider.

Attendance is rated as follows:

a) Exemplary (120 hours)
b) Satisfactory (96-73 hours)
c) Poor (72-0 hours)

Proctor assessment is a comprehensive evaluation that is rated as:

a) Exemplary (100 points)
b) Satisfactory (80 points)

c) Poor (60 points)

Proctors consider the following categories:

a) Promptness,
b) Personal Hygiene,
c) Appearance,
d) Attitude,
e) Skills Demonstration and
f) Hire ability.

If a student does ***not*** meet Satisfactory Progress for their Final GPA, he/she will ***not*** receive a Certificate of Completion and will be responsible for all Program fees.

SCHOOL'S POLICY CONCERNING SATISFACTORY PROGRESS

Definition of Satisfactory Progress

Satisfactory Progress is defined as maintaining a GPA of 70% or above at the end of each Grading Period. Programs that are 48 to 200 hours in length have two grading periods (midway and end of the program). Programs that are over 200 hours in length have three grading periods (in 8-week intervals), at the beginning, midway, and at the end of the program. Copy of progress report, counseling report, transcript, and certificate of completion are filed in the student's individual folder and are kept for five (5) years.

Progress Report Frequency

instructor will furnish the individual students their progress report biweekly by calculating, and monitoring of the following:

a) UNIT TEST and QUIZZES – If any of the students scored below 70% on the first test, he or she will have a one–time chance to improve his or her score to a passing score of 70%.
b) LAB/CLINICAL – Student will be given a chance to pass up to three attempts. If any student failed on the 3rd attempt, he or she will receive an unsatisfactory grade. The grade ranges are as follows:
    1) 1st Test = 90 - 100%
    2) 2nd Remedial = 80 - 89%
    3) 3rd Remedial = 70 - 79%

Probation Policy

Upon determining that student will be under probation, the instructor will notify the student within 3 days: Probation will be determined by the following:

a) Students who have not met Satisfactory Progress in the first Grading Period will be placed on Academic Probation. If the student has met Satisfactory Progress within the second Grading Period, then they may proceed with the Program, if not the student will be terminated.
b) If the school terminates a student for Unsatisfactory Academic Progress, the student may not re-enroll until after a minimum of one Grading Period has passed. The student who re-enrolls will be

placed back on Academic Probation upon entry and will be terminated again if Satisfactory Progress is not achieved within the Grading Period.

c) In the event that a student is placed on Academic Probation after the first Grading Period then achieves Satisfactory Progress after the second Grading Period but still does not have an overall GPA of 70%, the student will remain on Academic Probation and proceed to the third Grading Period. If the student receives an 'Exemplary' or 'Satisfactory' rating for the Externship requirement, that student has earned a Program Certificate of Completion. If this student receives a 'Poor' rating for the Externship requirement, the student will not earn a Program Certificate of Completion.

Conditions for Termination

Un-satisfactory Academic Progress during consecutive Grading Periods

Conditions for Re-admittance

If students whose enrollments are terminated for violation of the attendance policy many do not reenter before the start of the next grading period

System Providing Progress Reports

Grading Period GPAs are entered into the database for calculation and recording. Failures to meet Satisfactory Progress will subsequently have documented counseling. A copy of the counseling will be provided to the student by the instructor and a copy will be filed in the Student's Folder.

Policy On

a) **Incomplete Status:** Student submitting late homework and/or not meeting the 70% GPA requirement in the last grading period of the program will receive an Incomplete (I) grade and removal from the course without a certificate of completion for the program.

b) **Withdrawal from the Program:** You have the right to withdraw from a program of instruction at any time. For the purposes of determining the amount you owe for the time you attended, you shall be deemed to have withdrawn from the program when any of the following occurs:

- You notify the school of your withdrawal and the actual date of withdrawal; or
- The school terminates your enrollment; or
- You accumulate three (3) absences as stated in the attendance policy excluding school holidays.
- If you withdraw from the program after the period allowed for cancellation of the agreement, we follow the TWC guidelines for refund policy. The school will calculate whether a refund is due, and if so, remit a refund within 60 days following your withdrawal. For students receiving funds through any agencies (for example: VA, WIA, DARS, and MyCAA) unearned funds or refund will be returned to the agency to which students received the funding
- If the school has given you any equipment, including books or other materials, you shall return it to the school within seven (7) days following the date of your notice of cancellation or withdrawal. If you fail to return this equipment, including books, or other materials, in good condition within this period, the school may deduct its documented

cost for the equipment from any refund that may be due to you. Once you pay for the equipment it is yours to keep it without further obligation. In any event, you will never be charged more than the equipment charges stated in the contract

c) **Determination of the Withdrawal Date –** The student's withdrawal date is the last date of academic attendance as determined by the institution from its attendance records. The withdrawal date for a student who does not return from an approved leave of absence is set retroactively to the last date of attendance, as determined by the institution's attendance records.

NOTICE OF STUDENT'S RIGHT TO CANCEL CONTRACT

After the end of the cancellation period, you also have the right to stop school at any time, and you have the right to receive a refund for the parts of the course not taken. Your refund rights are described in the contract. If you have lost your contract, ask the school for a description of the refund policy.

SCHOOL'S ATTENDANCE RECORDS AND ABSENCES POLICY

A STUDENT DAILY ATTENDNACE form to monitor the number of hours a student attended is maintained by the instructor daily. Student must: 1) write down the time and signature when the class starts, and 2) signature the time when the students leave the class. This information is transferred into a Database daily for proper calculation. Absences may not exceed 10% and/or 5 consecutive days of the entire Program hours. The TTCCT representative will report on the students funded by any agency such as: **DEPARTMENT OF VETERANS AFFAIRS (VA), DARS, MyCAA, and WIA *for UNSATISFACTORY ATTENDANCE.***

Training Center of Central Texas, LLC regularly maintains attendance records. Students who are absent will be marked an **A for Absent**, **P for Present and E for Excuse Absent in the Database and annotated the reasons of absent and excuse absent daily.** Absences should occur only for urgent reasons such as ill health or other extenuating circumstances. Whenever possible, students should notify the faculty members in advance of any anticipated absences. Prior arrangements must be made with each faculty member for make-up work. Attendance is considered an essential part of the learning experience. Individual instructors may implement specific policies regarding attendance for a specific course, which may be more restrictive than the general institutional policies of TTCCT. The Director must approve the policy(s) prior to the beginning of class and students must be notified of the policy(s) via the course syllabus.

Policies Regarding

a) **Absences –** Attendance will be documented on a daily basis; student absences will be documented from the date of the first meeting of the class, regardless of when the student registers for the class. Training Center of Central Texas, LLC will continue to monitor the student's attendance in accordance with the following procedure:

1) The faculty member shall report each absence to the School Director by submitting the daily class roster to the Administrative Office

2) Once a student has missed one class, the faculty member shall immediately contact the student (via e-mail or phone) to remind him/her of the institutions attendance policy and the faculty member will submit the requisite reports to the Registrar
3) A student who has not met the 80% attendance requirement by the midpoint of his/her program will be placed on probation and will be subject to being dropped from the program
4) The instructor, reporting to the School Director, will determine the status of the academic progress of the student. After such investigation, a meeting with the student will be held to establish the student's interest in continuing *in* the program, what work is to be made up, and whether the student should be placed on academic probation. If it is apparent that the student does not have any interest in continuing the program, he/she will be dropped from the program. Otherwise, one of the following actions may be taken:
   i. The Instructor and Director may determine that the student is maintaining Academic progress and may continue class on academic probation status until the end of the course,
   ii. The Instructor and Director may determine that the student is not maintaining Academic progress and the student will be withdrawn from the Course; or

The Instructor and Director may determine that the student is not maintaining Academic progress in general, and the student will be withdrawn from TTCCT.

Students' absence:

b) **Tardies -** Students will be considered tardy 10 minutes after the start of class. Three Tardies will be counted as one absence. Students who exceed the time allowable for tardiness and absences, the TTCCT representative will report the student funded by any agency such as: **DEPARTMENT OF VETERANS AFFAIRS (VA), DARS, MyCAA, and WIA *for UNSATISFACTORY ATTENDANCE.***
c) **Retake/Make-up Work/Remedial** - No more than 5% of Total Program hours may be 'made-up'. Additional requirements for Retake/Make-up Work/Remedial are as follows:
   i. Be supervised by an approved instructor for the particular subject.
   ii. The student must demonstrate substantially the same level of knowledge or competence expected of a student who attended the scheduled class session.
   iii. Be completed within two weeks of the period during which the absence occurred.
   iv. Be documented by the school as completed: recording the date, time, duration of the Make-up session, and the name of the Supervising instructor.
   v. This document must be signed and dated by the student to acknowledge the Make-up session Make-up work may be required for any absence at the discretion of the instructor. The instructor has no obligation to provide make-up instruction or assignments to the students including but not limited to providing instruction on how to approach an assignment, what material was missed in class, an actual examination that the student missed due to an absence, etc. Therefore, the student must make every effort to attend classes on a regular and consistent basis.
d) **Leave of Absence-** The training center recognizes that there may be times when, due to extreme circumstances, student may require a leave of absence. It is recommended that a student request leave if he/she is planning to be absent for more than five (5) consecutive school days. The school Director may grant a leave of absence after determining that good cause is shown. School

attendance records will document the effective date of the leave of absence. A written statement, as to why the leave of absence was granted, signed by both the student and the school director indicating approval, shall be placed in the student's permanent file, If a leave of absence is approved, the student may be readmitted the following term. Reasons for a leave of absence include, but are not limited to:

- Serious student medical problem
- Military duty
- Death of an immediate family member
- Personal - unforeseen, but fully justifiable reason(s)

Time for approved leave of absence may be included in the calculation of a student's maximum program length. If a leave of absence commences before student completes the program of study, grade of "I" is recorded in student record.

e) **Conditions for Termination:** Absences exceeding 10% of the Program without valid proof of documentation.

f) **Externship and Clinical Rotations –** Externship and clinical experience, required in some programs enable students to work with patients/clients to apply the competencies and practices learned in the classroom. Students participating in externship and clinical training work under the supervision of a qualified assigned preceptor, as determined by school faculty, in participating sites and under the general supervision of school director and externship site's supervisor. Students are evaluated by supervisory personnel and evaluations are placed in the students' permanent records. Externship and clinical guidelines and requirements for each program may be obtained from the School Director.

The following applies to all students who are required to complete externship or clinical rotations:

i. Students are expected to meet all host site requirements. Site assignments are final and non- negotiable, and if a student refuses a clinical or externship site assignment, he/she may be terminated from the program
ii. Students are expected to travel to externship or clinical sites regardless of distance
iii. Site locations within a specified mile radius from the campus or from a student's home cannot be guaranteed
iv. The school reserves the right to re-assign site locations as needed to meet the requirements of the applicable educational program
v. Student MUST arrange and pay for their own transportation to and from their assigned clinical or externship experience, including any parking charges at the host site
vi. Students should expect the hours and days to vary depending on the host sites. Shifts on externship or clinical rotation can range from 8 to 12 hours, occurring any hour of the day, afternoon, or evening and any day of the week
vii. If students are going to be absent from their training site, they are required to notify their designated supervisor and the applicable school staff member
viii. Students must make up absences that occur during clinical or externship training to ensure that the required hours is completed prior to the end of the scheduled period

ix. Upon successful completion of all classroom requirements, students enrolled in a program that requires an externship are expected to immediately begin that portion of their program
x. Externship students are encouraged and should be prepared to participate in their externship training on a full-time basis (30-40 hrs per week)
xi. Students are expected to abide by the TTCCT's Conduct policy at all times while on externship or clinical rotations

g) **Conditions for Readmission/Reinstatement Policy:** Whether due to probation, suspension, or personal reasons, students who have been in any one of these conditions may be reinstated upon approval of the school director. After student has taken steps to demonstrate improvement in academic, personal, or any other critical situation, student may file Reinstatement request to school. All conditions are determined on an individual basis. Reinstatement requests should be submitted in person to the admissions department. If a student's enrollment is terminated due to disorderly conduct, he or she will not be readmitted**.**

Transcript Policy

Purpose:

- This policy outlines the procedures for the creation, issuance, and management of official student transcripts at The Training Center of Central Texas in accordance with Texas Workforce Commission (TWC) regulations and institutional standards.

Issuance of Transcripts:

- Current and former students may access their unofficial transcripts via the Training Center of Central Texas student portal at any time without a fee.
- Requests for **official documents** must include the student's full name, student ID number (if available), dates of attendance, and the recipient's name and address.

Confidentiality:

- Transcripts are considered confidential and will only be released with the written consent of the student or as otherwise permitted by law. The institution complies with the Family Educational Rights and Privacy Act (FERPA) and other applicable regulations in the management and release of student records.

Policy Review and Updates:

- This policy will be reviewed annually and updated as necessary to comply with changes in regulations or institutional practices.

SCHOOL'S POLICY REGARDING STUDENT CONDUCT

a) **Causes for Termination:** Absences exceeding 10% of the Program. Disrespecting the instructor and the staff, use of abusive language, cheating on an examination, possession of weapons, possession of alcohol/drugs, any interference with the function or activities of the school, disrupting the peace and order of the school such a fighting/quarreling/arguing.

b) Causes for Counseling:

1) Attendance: one (1) absence (equivalent to 3 tardies) = verbal counseling by the instructor. two (2) absences (equivalent to 6 tardies) = written counseling by the instructor. Three (3) absences (equivalent to 9 tardies) = counseling with the director and instructor. and student is at risk of removal from the course.
2) Academic: Late homework and a GPA below 70%. Homework is considered late if it is submitted more than one week from the due date. If a student scores below 70% on Quiz or Unit Test, the student may have one chance to re-take the exam to bring the score to 70%:
   i. 1st counseling -academic GPA below 70% in any subject = verbal counseling by the instructor.
   ii. 2nd counseling - if student is on academic probation due to unsatisfactory progress = written counseling by the instructor.
   iii. 3rd counseling - if a student is on academic probation for more than one grading period = written counseling and student at is at risk of removal from the program.

REQUIREMENT FOR GRADUATION

a) GPA must be 70% or higher
b) Maximum Time Allowed: Outlined by the Program calendar per individual class
c) Account must be paid full

DESCRIPTION OF SCHOOL'S PLACEMENT ASSISTANCE POLICY

The school does not guarantee job placement. However, all school officials and instructors will make every effort to assist all passing students to employment within nursing homes, pharmacies, or other appropriate facilities or businesses. Student participation in clinics, externships, and other networking opportunities facilitated by the school are also opportunities for graduate placement.

POLICIES AND PROCEDURES TO RESOLVE STUDENT GRIEVANCE/COMPLAINT

Training Center of Central Texas, LLC, guarantees procedural fairness to any accused person, whether the person is a TTCCT student or staff/faculty member. In pursuit of its policy of openness, accountability, and responsiveness to students, the institution's administration provides established grievance procedures. The director shall maintain a file on each grievance reported, including procedures followed and the final disposition of the case.

All grievances and complaints must be submitted in writing to the instructor before or after class time. The instructor is required to make the first effort to find a resolution to the grievance or complaint. If the instructor cannot resolve the grievance or complaint to the student's satisfaction, the Lead Instructor and Associates Director will become involved. After that, the School Director will be included. If necessary, the

School Director will then help. Students may also take advantage of the School Director's open-door policy during business hours.

Definition: A grievance is a complaint arising out of any alleged, unauthorized, or unjustified act or decision by a student, faculty member, administrator, or staff person, which in any way adversely affects the status, rights, or privileges of a member of the student body. The burden of proof shall rest with the complainant.

If a student has a grievance and wishes it to be recognized, a written complaint must be submitted to TTCCT in a letter format. The written grievance must clearly state the student's name, the nature of the complaint, the name(s) of all parties directly involved in the complaint, and any appropriate documentary evidence.

Steps towards resolution: Based on the grievance's information, steps toward resolution shall begin with informal discussions headed by the immediate instructor. Resolution shall be attempted at the lowest possible level. If a satisfactory solution cannot be reached within a reasonable period, the grievance shall be scheduled for presentation to the Director for appropriate action. Informal discussion between persons directly involved in a grievance is essential in the early stages of dispute reconciliation and shall be encouraged at all the grievance procedure stages.

Procedures: If informal recourse fails to resolve the grievance within a reasonable time after filing, the director will schedule a Student Grievance Committee meeting. This committee's voting members shall be comprised of the director, the program instructor, and one faculty member who shall sit on the Committee on a rotating basis.

A copy of the grievance shall be given in writing to the person(s) against whom the complaint is brought. The Committee shall review and consider documentary records which relate to the case, including the grievance and its supporting documentation and any documentary evidence or statement by the person(s) against whom the complaint was filed. Committee members shall arrive at a judgment in consultation among themselves. A majority vote of such qualified members may recommend appropriate or disciplinary actions or changes in policy to the appropriate administrative officials.

If students have exhausted these procedures and the problems have not been resolved, they have the right to contact the Texas Workforce Commission Careers Schools and Colleges:

a) Texas Workforce Commission Careers Schools and Colleges offices by mail. Complaints received by phone must be accompanied by a written follow-up letter.
b) Include the following required information in the letter of complaint:
    1) The nature of the problem
    2) The date(s) that the problem(s) occurred,
    3) The name(s) of the individual(s) involved in the problem(s) (within the college or other students who were involved),
    4) Copies of important information regarding the problem(s) (facts, not rumors, lead to solutions),

5) Evidence demonstrating that the institution's complaint procedure was followed prior to contacting Texas workforce Commission Careers Schools and Colleges. The complaint must be signed by the complainant
6) Any unresolved grievances or complaints will be directed to:

TEXAS WORKFORCE COMMISSION CAREER SCHOOLS AND COLLEGES

101 East 15'h Street, Room 226T, Austin, Texas 78778-0001

Phone: 512-936-3100

http://csc.twc.state.tx.us

APPROVED AND REGULATED STATEMENT

"Approved and regulated by Texas Workforce Commission, Career Schools and Colleges, Austin, Texas."

TRUE AND CORRECT STATEMENT

"THE INFORMATION CONTAINED IN THIS CATALOG IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE"