4. Understand the concept of dispute resolution techniques including, but not limited to, mediation, arbitration, and community resolution procedures.
5. Understand the law of contracts and general business law.
6. Describe the processes of comprehensive examination of problems of proof and the rules of evidence.
7. Understand the constitution of the FSM, its States and municipalities.
8. Describe the FSM and State rules of appellate & civil procedure.
9. Describe and explain the FSM and State real property laws.
10. Practice actual supervised pre-trial and trial skills in civil and criminal cases.

Program Requirements

Major Requirements.....30 credits

LAW 200 Legal Research and Writing (3)
LAW 210 Criminal Procedure (3)
LAW 215 Criminal Law (3)
LAW 220 Torts (3)
LAW 224 Contracts (3)
LAW 228 Evidence (3)
LAW 232 Constitutional Law (3)
LAW 236 Appellate and Civil Procedure/Jurisdiction (4)
LAW 238 Real Property (2)
LAW 240 Trial Practice Internship (3)

CERTFICATE IN TRIAL COUNSELORS
Suggested Schedule

First Semester

LAW 200 Legal Research and Writing	3
LAW 224 Contracts	3
LAW 220 Torts	3
LAW 215 Criminal Law	3
	12

Second Semester

LAW 232 Constitutional Law	3
LAW 238 Real Property	2
LAW 210 Criminal Procedure	3
LAW 236 Appellate and Civil Procedure/Jurisdiction	4
	12

Summer Session

LAW 228 Evidence	3
LAW 240 Trial Practice Internship	3
	6

VOCATIONAL EDUCATION PROGRAM

The vocational training divisions of COM-FSM are learning communities dedicated to creating a high quality workforce through educational excellence and student success in collaboration with its diverse communities. The goals of the division are to (1) create and provide quality vocational and technical instructional programs, courses, and experiences that foster student learning consistent with workforce needs; (2) foster a positive college climate that supports learning, communication, recognition, and collaboration among a diverse faculty and student body; (3) provide instructional, administrative, and student support services to enable COM-FSM to meet the goal of creating a quality workforce; (4) support and expand responsive services that provide student access into COM-FSM vocational and technical programs and courses and promote success within a diverse student body; (5) develop and

foster partnerships with business, industry, labor, employment and training agencies, and other educational institutions; (6) promote COM-FSM vocational and technical program development through public relations and marketing activities, and business and industry contacts; (7) attract and develop quality and diverse personnel committed to the goals of excellence and workforce skill standards; (8) maintain current and accessible facilities and equipment, and acquire emerging technologies for the learning and work environments; and (9) promote continuous quality improvement in all COM-FSM vocational and technical activities and services.

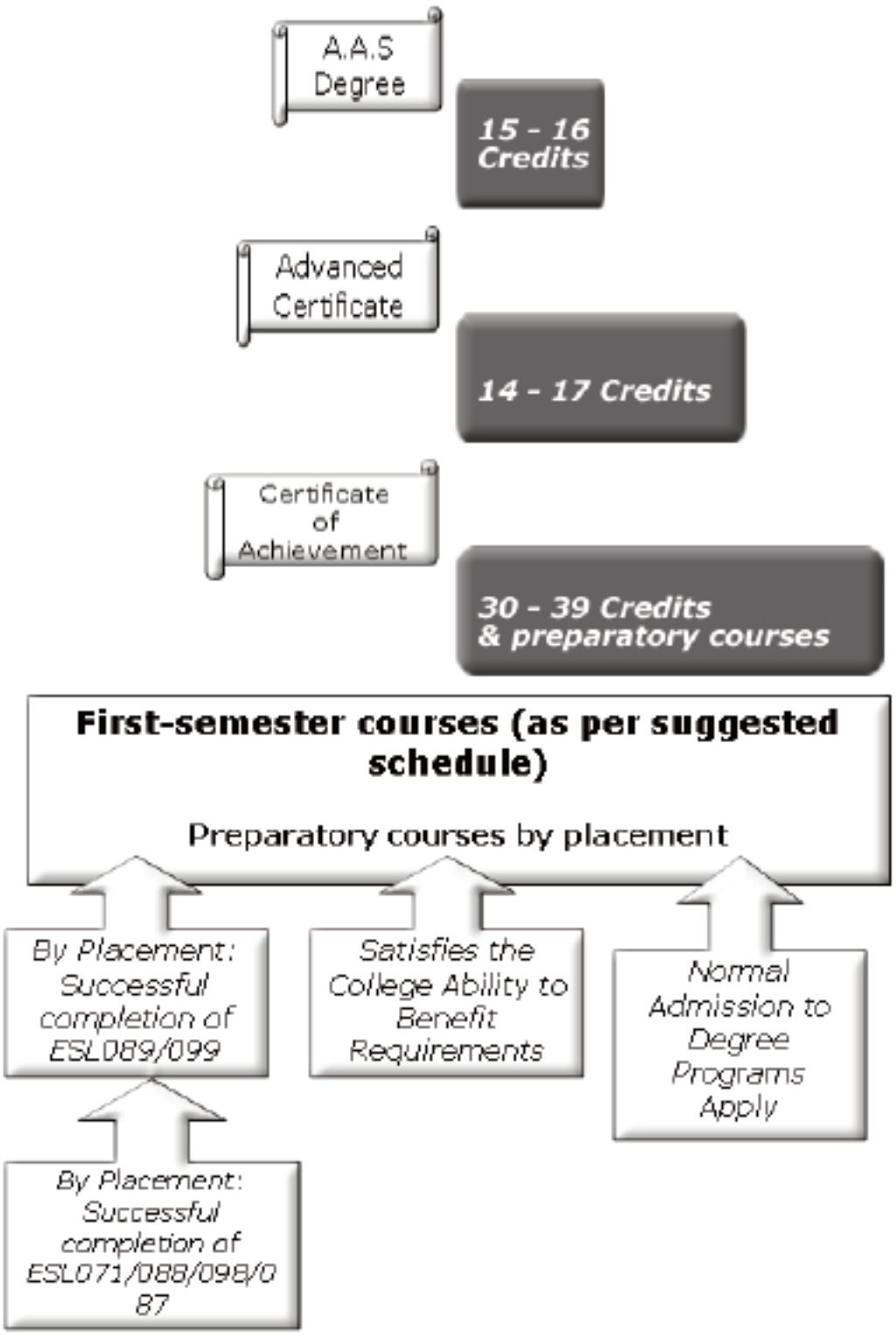
The associate of applied science (A.A.S.) degrees at COM-FSM are designed as at least a two-year technical occupational professional degree, consisting of a minimum of 60 semester credits, which provides students with skills and competencies for gainful employment. This degree is not intended nor designed for transfer directly into a baccalaureate program, but may include some baccalaureate level course offerings. The A.A.S. degree programs incorporate multiple exit points when possible; awarding of certificates and advanced certificates. Students must pass the entrance tests and other entrance requirements for an associate degree to be admitted into the A.A.S. degree programs.

An advanced certificate program is designed to prepare students for technical or vocational employment within a one- to two-year period (36-68 credit hours). The total number of credit hours for the advanced certificate must not exceed those required for an A.A.S. degree in the same program of study. A prescribed program of technical and general education courses including a work experience component provide preparation for a specific occupation, credit toward an associate of applied science degree, and continued training opportunities for certificate program graduates.

The primary purpose and features of certificate programs of study are to provide marketable, entry-level skills for a time period less than that required for advanced certificate or associate degree programs. Certificates are organized programs of study consisting of courses designed to meet a defined set of competencies. Certificates qualify students to take external licensure, vendor-based, or skill standards examinations in the field. If standardized external exams are not available in the field of study, certificates prepare students at skill levels expected of employees in an occupation found in the local economy. Students do not need to take the entrance exam to be admitted into the certificate programs.

The College of Micronesia-FSM has developed apprentice programs to serve the needs of the nation and the individual states. The College will administer the Apprenticeship Training Program sponsored by COM-FSM and individual employers and organizations. Apprenticeship programs are approved and registered with the United States Department of Labor, Bureau of Apprenticeship Training. During the term of apprenticeship, the apprentice learns a craft or trade through a combination of formal on-the-job (OJT) under the guidance of a skilled worker or journey worker and classroom instruction at the College of Micronesia-FSM. The duration of the apprenticeship training varies with the individual occupation. The requirement for eligibility for the award of Certificate of Completion of Apprenticeship is a minimum of 144 hours per year of classroom instruction plus the designated hours of practical OJT.

Entry and exit points of the Associate of Applied Science Degrees in Telecommunication Technology, Electronics Technology or Building Technology



General Education Program
Vocational Programs
(General education component)

Mathematics 4
English 3
Computer Applications.....3
Natural Science 3

Sub Total 13

Additional General Education courses 0-17

General Education Total Credit Hours.....13-29

Technical & Support Component ..... **Sub-total 32-65**

General Education and Technical & Support Components must be distributed so programs do not exceed 76 credit hours ..... **Total 60-76**

Approved Courses for General Education

The following courses are currently approved for General Education Areas. The list is not exhaustive and may be added to during the life of the catalog. Students should check with their advisors prior to course selection. Some of the courses are limited to a specific degree or program, so students should also check the footnotes when selecting courses.

<u>English Communication Skills</u>
EN 110 Advanced Reading (3)
EN 120a Expository Writing I (3)
EN 120b Expository Writing II (3)
EN 123 Technical Communications (3)[1]
EN/CO 205 Speech Communication (3) [2]
[1]May be used for the AAS degree only.
[2] For Students in the Aeronautics Maintenance Technology or Nursing Program

<u>Mathematics</u>
MS 100 College Algebra or
MS 101 College Algebra and Trigonometry (3)

MS 152 Calculus I (3) [2]
MS 104 Technical Math I (4) [1]
MS 106 Technical Math II (4) [1]
VEE 135 Digital Electronics I (3) [1]
[1]May be used for the AAS degree only.
[2] For Students in the Aeronautics Maintenance Technology Program

<u>Natural Science</u>
SC 120 Biology w/lab (4)
SC 130 Physical Science w/lab (4)
SC 230 Introduction to Chemistry w/lab (4)
SC 240 Intro to Physics w/lab (4) [2]
SC 100a Science for Teachers (3)
SC 101 Health Science (3)

SC 110 Introduction to Ecology (3)
SC 111 Environmental Studies (3)
SC 112 Introduction to Human Nutrition (3)
SC 201 Astronomy (3)
SC 202 Weather and Climate (3)
SC 206 Oceanography and Coastal Process in Classroom (3)
SC 210 Conservation Science (3)
SC 220 Introduction to Geology (3)
VTE 265 Fiber Optics (3) [1]
VEE 103 Electronic Fundamentals (4) [1]
AG 101 Introduction to Agriculture (3)
MR 230 Ichthyology w/lab (4) [3]
MR 252 Fishery Extension (3) [3]

[1] May be used for the AAS degree only.

[2] For Students in the Aeronautics Maintenance Technology Program.

3 For Marine Science Majors only.

Social Sciences
SS 100 World of Work (3) [1]
SS 150 History of Micronesia (3)

[1] May be used for the AAS degree.

Computer Applications
CA 100 Computer Literacy (3) [1]

[1] May be used for the AAS degree

Humanities
AR 101 Introduction to Art (3) [1]
AR 105 Painting (3)
MU 101 Introduction to Music (3)
SS 170 World History I (3)
SS 240 East-Asian History I (3)
EN 201 Introduction to Literature (3)
EN 202 Narrative Fiction (3)
EN 204 Poetry (3)
EN 205 Literature of the Sea (3)
EN 210 Writings on 19th Century Pohnpei (3)
FL 101 Japanese I (3)
FL 105 French I (3)
FL 108 Spanish I (3)
FL 110 German I (3)
SS/PY 101 General Psychology

[1] May be used for the AAS degree

Exercise Sports Science
ESS 101(x) Individual activity (1)
ESS 102(x) Group/team activity (1)

ASSOCIATE OF APPLIED SCIENCE in TELECOMMUNICATION TECHNOLOGY

The Telecommunication technology program offers academic course work, technical skills training and practical experience to prepare the students for positions in the Telecom industry.

Students work with communication systems such as microwave, fiber optics and telephone. Maintenance, troubleshooting, repairing and modifying Telecommunication equipment and systems is the base for a career as a technician in this high-tech field. Telecommunications is one of the fastest growing industries in the world. The computer and information technologies are driving the need for more telecommunications services. This increase in services also drives the need for more qualified technicians. The academic course work, technical skills training and practical experience available in this program prepare the student for positions within the industry. Training on and with the state of the art computer aided instruction system at COM-FSM will provide the technical edge needed in today's telecommunications industry. Embedded within the program are three separate exit points, Certificate of Achievement in Electronic Engineering Technology, Advanced Certificate in Telecommunication Engineering and the Associate of Applied Science in Telecommunication Technology.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place
2. Use electronics tools and test equipment competently
3. Interpret schematic diagrams and waveforms
4. Build electronics projects to a given specification
5. Practice a career in the Telecom industry.
6. Troubleshoot microwave, fiber optic, radio communication, and telephone systems.

Preparatory Courses (by placement)

General Education Core Requirements 22 credits

English (3 credits)
EN 123 Technical Communication (3)
Mathematics (8 credits)
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
Computer Applications (3 credits)
CA 100 Computer Literacy (3)
Any Science or Marine Science with Lab (4 credits)
Any course in Oceanography, Marine Biology, Chemistry, Biology, or Physical Science (4)
Humanities (3 credits)
Any course in Art, Music, History, Philosophy or Language
Exercise Sport Science (1 credit)
Any exercise sport science course

Technical Requirements..... .....45 credits

VSP 121 Industrial Safety Electrical/Electronic (1.5)
VEE 100 Soldering and Mechanical Termination Techniques (1.5)
VEM 110 Workshop Fabrication/Hand and Power Tool Skills (3)
VEE 103 Electronic Fundamentals I (3)
VEE 104 Electronic Fundamentals II (4)
VEE 110 Discrete Devices I (3)
VEE 125 Electronic Circuits (3)
VEE 135 Digital Electronics I (3)
VEE 230 Radio Communications (3)
VEE 235 Digital Electronics II (3)
VEE 240 Signal Processing (3)
VTE 260 Microwave (3)
VTE 261 Fiber Optics Installation (4) **or**
VTE 265 Fiber Optics (3)
VTE 270 Telecommunication Systems (3)

VTE 280 Telephone Systems (3)
Technical Electives* (2 credits)
VEE 250 Co-operative Education Program (2)
VTE 281 Cellular Phone Repair (3)
VEE 266 Rotating Machinery (3)
*(Any technical course approved by instructor)

AAS Degree in Telecommunication Technology .....67 credits

CERTIFICATE OF ACHIEVEMENT IN ELECTRONIC ENGINEERING TECHNOLOGY

Program Learning Outcomes

Electronics Engineering Technology program offers academic course work, technical skills, training and practical experience to prepare the students for positions in the Electronics industry.

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place
2. Use electronics tool and test equipment competently
3. Interpret schematic diagrams and waveforms
4. Build electronics projects to a given specification

Preparatory Courses (by placement)

General Education Requirements .....15 credits
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
CA100 Computer Literacy (3)
Any Science w/Lab (4)

Technical Requirements .....22 credits
VSP 121 Industrial Safety Electrical/Electronic (1.5)
VEE 100 Soldering and Mechanical Termination Techniques (1.5)
VEE 103 Electronic Fundamentals I (3)
VEE 104 Electronic Fundamentals II (4)
VEE 110 Discrete Devices I (3)
VEE 125 Electronic Circuits (3)
VEE 135 Digital Electronics I (3)
VEM 110 Workshop Fabrication/Hand and Power Tool Skills (3)

Total Requirement .....37 credits

Advanced Certificate in Telecommunication Technology

Program Learning Outcomes

The program prepares students to advance in their careers in Telecommunications. Students are introduced to communication theory and practices in troubleshooting and maintenance.

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place
2. Use electronics tools and test equipment competently
3. Interpret schematic diagrams and waveforms
4. Build electronics projects to a given specification
5. Practice a career in the Telecom industry
6. Troubleshoot radio receivers

Completion of the Certificate of Achievement in Electronic Engineering Technology (37credits)

General Education Requirements .....3 credits
EN123 Technical Communications (3)

Major Requirements (11) .....11 credits
VEE 235 Digital Electronics II (3)
VEE 230 Radio Communications (3)
VEE 240 Signal Processing (3)
Technical Elective (2 credits) One from the following
VEE 250 Co-operative Education Program (2)
VTE 281 Cellular Phone Repair (3)
VEE 266 Rotating Machinery (3)

Total Requirements .....51 credits

ASSOCIATE OF APPLIED SCIENCE IN TELECOMMUNICATION TECHNOLOGY

Completion of the Advanced Certificate in Telecommunication Engineering (51 credits)

General Education Requirements .....4 credits
Humanities (3 credits)
Any course in Art, Music, History, Philosophy or Language (3)
Exercise Sport Science (1 credit)
Any exercise sport science course (1)

Technical Requirements .....12 credits
VTE 265 Fiber Optics (3) **or** VTE 261 Fiber Optics Installation (3)
VTE 260 Microwave (3)
VTE 270 Telecommunication Systems (3)
VTE 280 Telephone Systems (3)

Total Requirements .....67 credits

Suggested Schedule

COM-FSM Requirements

First Semester
MS 104 Technical Math I 4
CA 100 Computer Application 3
VSP 121 Industrial Safety Electrical/Electronic 1.5

VEE 100 Soldering and Mechanical Termination Techniques....1.5
Any Science Course w/Lab 4
VEE 103 Electronic Fundamentals I 3
17

Second Semester
MS 106 Technical Math II....4
VEE 104 Electronic Fundamentals II 4
VEE 110 Discrete Devices I 3
VEM 110 Workshop Fabrications 3
VEE 125 Electronic Circuits 3
17

Summer Session
VEE 135 Digital Electronics I 3
3

Exit 1: Certificate of Achievement in Electronic Engineering Technology
Total Requirement: 37 credits

Third Semester
EN 123 Technical Communications 3
VEE 235 Digital Electronics II 3
VEE 230 Radio Communications 3
VEE 240 Signal Processing 3
Technical Elective....2/3
14/15

Exit 2: Advanced Certificate in Telecommunication Technology
Total Requirement: 51-52 credits

Fourth Semester
Humanities 3
VTE 260 Microwave....3
VTE 265 Fiber Optics....3
VTE 270 Telecommunication Systems 3
VTE 280 Telephone Systems.... 3
Exercise Sport Science course 1
16

Exit 3: Associate of Applied Science in Telecommunication Technology
Graduation Requirements: 67-68 credits

ASSOCIATE OF APPLIED SCIENCE in ELECTRONIC TECHNOLOGY

The Electronics technology program offers academic course work, technical skills training and practical experience to prepare the students for positions as technicians in this high-tech field. Students are introduced to theory and practices in troubleshooting digital systems and communication systems.

Maintenance, troubleshooting, repairing and modifying electronic equipment and systems is the base for a career as a technician in this high-tech field. The academic course work, technical skills training and practical experience available in this program prepares students for employment as technicians in this rapidly growing industry. Training on and with the state of the art computer aided instruction system at COM-FSM will provided the technical edge needed in today's electronic industry. Embedded within the program are three separate exit points, Certificate of Achievement in Electronic Engineering Technology, Advance Certificate in Electronic Technology and completion of the Associate of Applied Science in Electronic Technology.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electronics tools and test equipment competently.
3. Interpret schematic diagrams and waveforms.
4. Build electronics projects to a given specification.
5. Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.
6. Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.

Preparatory Courses (by placement)

General Education Core Requirements .....22 credits

English (3 credits**)**
EN 123 Technical Communication (3)
Mathematics (8 credits)
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
Computer Applications (3 credits)
CA 100 Computer Literacy (3)
Any Science with Lab (4 credits)
Oceanography, Marine Biology, Chemistry, Biology, or Physical Science (4)
Humanities (3 credits)
Any course in Art, Music, History, Literature, Philosophy or Language (3)
Exercise Sport Science (1 credit)
Any Exercise Sport Science course(1)

Technical Requirements.....45-46 credits

VSP 121 Industrial Safety Electrical/Electronic (1.5)
VEE 100 Soldering and Mechanical Termination Techniques (1.5)
VEM 110 Workshop Fabrication (3)
VEE 103 Electronic Fundamentals (3)
VEE 104 Electronic Fundamentals II (4)
VEE 110 Discrete Devices I (3)
VEE 125 Electronic Circuits (3)
VEE 135 Digital Electronics I (3)

VEE 222 Discrete Devices II (3)
VEE 235 Digital Electronics II (3)
VEE 223 PC Hardware & Software (4)
VEE 224 Video Systems & Product Servicing (4)
VEE 225 Business Machine Servicing (4)
VEE 240 Signal Processing (3)
Technical Elective* (2-3 credits)
VEE 250 Co-operative Education Program (2)
VTE 281 Cellular Phone Repair (3)
VTE 261 Fiber Optics Installation (3)
VEE 266 Rotating Machinery (3)

(* Any technical courses approved by instructor)

AAS Degree Electronic Technology .....67-68 credits

CERTIFICATE OF ACHIEVEMENT IN ELECTRONIC ENGINEERING TECHNOLOGY

Program Learning Outcomes

Electronic Engineering Technology program offers academic course work, technical skills training and practical experience to prepare the students for positions in the Electronic industry.

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electronics tool and test equipment competently.
3. Interpret schematic diagrams and waveforms.
4. Build electronic projects to a given specification.

Preparatory Courses (by placement)

General Education Requirements .....15 credits
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
CA100 Computer Literacy (3)
Any Science with Lab (4)

3. Technical Requirements.....22 credits
VSP 121 Industrial Safety Electrical/Electronic (1.5)
VEE 100 Soldering and Mechanical Termination Techniques (1.5)
VEM 110 Workshop Fabrication/Hand and Power Tool Skills (3)
VEE 103 Electronic Fundamentals I (3)
VEE 104 Electronic Fundamentals II (4)
VEE 110 Discrete Devices I (3)
VEE 125 Electronic Circuits (3)
VEE 135 Digital Electronics I (3)

Total Requirements .....37 credits

ADVANCED CERTIFICATE IN ELECTRONIC TECHNOLOGY

The Electronic Technology program offers academic course work, technical skills training and practical experience to prepare the students for positions as technicians in this high-tech field. Students are introduced to theory and practices in troubleshooting digital systems.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electronics tools and test equipment competently.
3. Interpret schematic diagrams and waveforms.
4. Build electronics projects to a given specification.
5. Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.

Completion of the Certificate of Achievement in Electronic Technology (37 credits)

General Education Requirements .....3 credit
EN 123 Technical Communications (3)

Major Requirements .....12-13 credits
VEE 222 Discrete Devices II (3)
VEE 235 Digital Electronics II (3)
VEE 223 PC Hardware & Software (4)
Technical Elective (2-3 credits)
VEE 250 Co-operative Education Program (2)
VEE 266 Rotating Machinery (3)
VTE 281 Cellular Phone Repair (3)
VTE 261 Fiber Optics Installation (3)

Total Requirements .....52-53 credits

ASSOCIATE OF APPLIED SCIENCE in ELECTRONICS TECHNOLOGY

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electronics tools and test equipment competently.
3. Interpret schematic diagrams and waveforms.
4. Build electronics projects to a given specification.
5. Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.
6. Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.

Completion of the Advanced Certificate in Electronic Technology (52-53 credits)

General Education Requirements .....4 credits
Humanities (3 credits)
Any course in Art, Music, History, Literature, Philosophy or Language (3)
Exercise Sport Science (1 credit)
Any Exercise Sport Science course (1)

Technical Requirements .....11 credits
VEE 224 Video Systems & Product Servicing (4)
VEE 224 Business Machine Servicing (4)
VEE 240 Signal Processing (3)

Total Requirements.....67-68 credits

Suggested Schedule
COM-FSM Requirements

Fall Semester

MS 104 Technical Math I	4
CA 100 Computer Application	3
VSP 121 Industrial Safety Electrical/Electronic	1.5
VEE 100 Soldering and Mechanical Termination Techniques	1.5
Any Science with Lab	4
VEE 103 Electronic Fundamentals I	3
	17

Spring Semester

MS 106 Technical Math II	4
VEE 104 Electronic Fundamentals II	4
VEE 110 Discrete Devices I	3
VEM 110 Workshop Fabrications/Hand and Power Tool Skills	3
VEE 135 Digital Electronics	3
	17

Summer Session

VEE 125 Electronic Circuits	3
	3

Exit 1: Certificate of Achievement in Electronic Engineering Technology
Total Requirement: 37 credits

Fall Semester

EN 123 Technical Communication	3
VEE 223 PC Hardware & Software	4
VEE 222 Discrete Devices II	3
VEE 235 Digital Electronics II	3
Technical Elective	2-3
	15-16

Exit 2: Advanced Certificate in Electronic Technology
Total Requirements: 52-53 credits

Spring Semester

VEE 224 Video Systems & Product Servicing	4
VEE 225 Business Machine Servicing	4
VEE 240 Signal Processing	3
Humanities	3
Exercise Sport Science	1
	15

Exit 3: Associate of Applied Science in Electronic Technology

Graduation Requirements: 67-68 credits

ASSOCIATE OF APPLIED SCIENCE DEGREE IN BUILDING TECHNOLOGY

Building Technology students are introduced to theory and practice related to one specific trade occupation with the opportunity to study in other professions. The graduates develop specialist skills and knowledge of their selected profession. Building and design methodologies used to create both domestic and commercial structures from start to finish will be examined. A pre-requisite of the AAS Degree is a certificate in any of the trade certificate programs. All students entering the AAS Degree must meet all requirements to be placed into the Degree level before being admitted.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Identify safety and occupational health requirements in the building industry.
2. Use specified hand and power tools.
3. Perform basic hand skills in producing products to given specifications.
4. Identify the basic function of other building trades.
5. Interpret information from blue print drawings.
6. Participate in the specific building technology trade they majored in.

Preparatory Courses (by placement)

General Education Requirements .....22 credits
English (3 credits)
EN 123 Technical Communication (3)
Mathematics (8 credits)
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
Computer Applications (3 credits)
CA 100 Computer Literacy (3)
Any Science with Lab (4 credits)
Oceanography, Marine Biology, Chemistry, Biology, or Physical Science (4)
Humanities (3 credits)
Any course in Art, Music, History, Philosophy or Language (3)
Exercise Sport Science (1 credits)
Exercise Sport Science course (1)
MAJOR REQUIREMENTS .....39 credits**
(Technical Building Studies & Electrical)
****Major requirements to include minimum of 39 credits of specific technical content. Therefore, as an example, if a student is majoring in Electrical that student must complete at least 39 credits of specific electrical technical requirements.**

4. Graduation Requirements* .....61 credits**

****Diploma will state AAS Degree in Building Technology—Major in Electrical.**

CERTIFICATE OF ACHIEVEMENT IN CONSTRUCTION ELECTRICITY

The Construction Electricity program offers academic course work with the practical experiments to provide the student with the basic technical skill to prepare the students for positions in the Electrical Industry.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electricity hand and power tools competently.
3. Test electrical equipment.
4. Interpret schematic wiring diagrams and waveforms.
5. Determine the amount of load per circuit.
6. Install residential wiring circuits according to given specification and plan.

Program Requirements for the Certificate in Construction Electricity

General Education Requirements .....17 credits
ESL 050 Technical English (3) **or** SS 100 World of Work (3)
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
BU 097 Introduction to Entrepreneurship (3)
CA 100 Computer Literacy (3)

Technical Requirements .....21 credits
VEM 102 Electrical/Electronic Drawing and Sketching (1.5)
VEM 103 Basic Electricity I (4)
VEM 104 Basic Electricity II (5)
VEM 110 Workshop Fabrication/Hand and Power Tool Skills (3)
VEM 111 Electrical Wiring I (3)
VEM 112 Electrical Wiring II (3)
VSP 121 Industrial Safety Electrical/Electronic (1.5)

Total Requirements .....38 credits

ADVANCED CERTIFICATE IN BUILDING TECHNOLOGY MAJOR – CONSTRUCTION ELECTRICITY

The Building Technology Advanced Certificate program offers academic course work, technical skills training and practical experience to prepare the students for positions as technicians in the electrical field. Students are introduced to theory and practices in installation, troubleshooting basic motors.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electricity hand and power tools competently.
3. Test electrical equipment.
4. Interpret schematic wiring diagrams and waveforms.
5. Determine the amount of load per circuit.
6. Install residential wiring circuits according to given specification and plan.
7. Identify and interpret basic solid state (electronics) symbols and circuit schematics commonly found in the electrical industry.

8. Analyze circuit operations on basic motors.
9. Perform basic troubleshooting on basic motors.

Completion of Certificate in Construction Electricity

Transfer of allowable credits ..... 32 credits

General Education Requirements .....10 credits
English (3 credits)
EN 123 Technical Communications (3)
Natural Science (4 credits)
SC 130 Physical Science w/lab (4)
Humanities (3 credits)
Any Course in art, music, history, culture, literature, philosophy or language (3)

Major Requirements .....6 credits
VEE 110 Discrete Devices I (3)
VEE 266 Rotating Machinery (3)

Total Requirements .....48 credits

ASSOCIATE OF APPLIED SCIENCE DEGREE IN BUILDING TECHNOLOGY MAJOR—CONTRUCTION ELECTRICITY

The Building Technology Majoring – Construction Electricity program offers academic course work, technical skills training and practical experience to prepare the students for positions as Electrician in this field. Students are introduced to theory, installation and practices in troubleshooting residential circuits, motor circuits and motor control circuits.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Practice safety and occupational health procedures in the work place.
2. Use electricity hand and power tools competently.
3. Test electrical equipment.
4. Interpret schematic wiring diagrams and waveforms.
5. Determine the amount of load per circuit.
6. Install residential wiring circuits according to given specification and plan.
7. Identify and interpret basic solid state (electronics) symbols and circuit schematics commonly found in the electrical industry.
8. Analyze circuit operations on basic motors.
9. Perform basic troubleshooting on basic motors.
10. Install and perform basic maintenance on air-conditioning units.
11. Interpret and install circuits according to rules and regulations of the National Electric Code book.
12. Install and analyze basic motor control circuits.

Completion of Advanced Certificate in Building Technology .....48 credits

General Education Requirements .....1 credits
Exercise Sports Science (1 credit)
Exercise Sports Science course (1)

Major Requirements .....17 credits

VEE 220 Discrete Devices II (3)
VEM 105 Basic Electricity for AC (3)
VEM 113 Basic Refrigeration I (4)
VEM 212 National Electrical Code (3)
VEM 240 Industrial Wiring (4)

Graduation Requirements .....66 credits

ASSOCIATE OF APPLIED SCIENCE IN BUILDING TECHNOLOGY - CONSTRUCTION ELECTRICITY

Suggested Schedule

Fall Semester

ESL 050 Technical English **or** SS 100 World of Work... 3
MS 104 Technical Math I 4
VEM 102 Electrical/Electronic Drawing and Sketching 1.5
VEM 103 Basic Electricity I. 4
VEM 110 Workshop Fabrication/Hand and Power Tool Skills 3
VSP 121 Industrial Safety Electrical/Electronic 1.5
17

Spring Semester

CA 100 Computer Application 3
MS 106 Technical Math II 4
VEM 104 Basic Electricity II 5
VEM 111 Electrical Wiring I 3
VEM 112 Electrical Wiring II 3
18

Summer Session

BU 097 Introduction to Entrepreneurship 3
3

Exit 1: Certificate of Achievement in Building Technology
Total Requirements: 38 credits
Transfer of allowable credits: 32 credits

Fall Semester

VEE 110 Discrete Devices I 3
VEE 226 Rotating Machinery 3
EN 123 Technical Communications.....3
SS 150 History of Micronesia 3
Science w/lab 4
16

Exit 2: Advanced Certificate in Building Technology
Total Requirements: 48 credits

Spring Semester

VEE 222 Discrete Devices II 3
VEM 105 Basic Electricity for AC 3
VEM 113 Basic Refrigeration I 4
VEM 212 National Electrical Code (US) 3
VEM 240 Industrial Wiring 4
Exercise Sport Science Course 1
18

Exit 3: Associate of Applied Science in Building Technology
Graduation Requirements: 65 credits

CERTIFICATE OF ACHIEVEMENT in CARPENTRY

Carpentry is one of the basic trades in the construction field. Students will be introduced to the techniques and methodology of component construction involving cabinet setout, sub-floor, wall construction, roofing and interior finishing.

Program Learning Outcomes

Upon completion of the program, students will competently be able to:
1. Identify safety and occupational health requirements in the Carpentry trade.
2. Use competently specified hand and power tools.
3. Perform basic hand skills in constructing projects to given specifications.
4. Interpret construction information from blue print drawings.
5. Participate in the construction industry.

Program Requirements for Certificate in Carpentry

General Education Requirements .....13 credits
- ESL050 Technical English (3) **or** SS 100 World of Work (3)
- MS 104 Technical Math I (4)
- CA 100 Computer Literacy (3)
- BU 097 Introduction to Entrepreneurship (3)

Technical Requirements .....21 credits
- VAE 103 Blueprint Sketching and Interpretation (3)
- VCT 153 Introduction to Carpentry (3)
- VCT 163 Concrete Form Construction (3)
- VCT 173 Rough Framing and Exterior Finishing (3)
- VCT 183 Finishing and Trim Work (3)
- VCE 195 Construction Procedures (1.5)
- VSP 153a Industrial Safety (1.5)
- VCT 154 Introduction to Masonry (3)

Total Credits Required.....34 credits

Suggested Schedule

Fall Semester
- ESL050 Technical English **or** SS 100 World of Work.....3
- MS 104 Technical Math I 4
- VAE 103 Blueprint Sketching and Interpretation 3
- VCT 153 Introduction to Carpentry 3
- VSP 153a Industrial Safety 1.5

14.5

Spring Semester
- VCT 163 Concrete Form Construction 3
- VCT 173 Rough Framing and Exterior 3
- VCT 183 Finishing and Trim Work 3
- VCE 195 Construction Procedures 1.5
- VCT 154 Introduction to Masonry..... 3

13.5

Summer Session
- CA 100 Computer Literacy.....3
- BU 097 Introduction to Entrepreneurship 3

6

Total Requirements: .....34 credits

CERTIFICATE OF ACHIEVEMENT
in
CABINET MAKING/FURNITURE MAKING

Cabinet making/ Furniture making is a specialized trade within the building industry. The students will be introduced to the techniques and methodology of components involved in the construction of cabinet/furniture from working drawings, design, full size set outs, manufacturing, and installation of finished products.

Program Learning Outcomes

Upon program completion the successful graduate will be able to competently perform the following skills:

1. Identify safety and occupational health requirements in the Cabinetmaking/Furniture making industry.
2. Use specified hand and power tools competently in making products to given specifications.
3. Demonstrate competence in complete production process from plans to final finishing.
4. Interpret information from blue prints or drawings.
5. Participate in the Cabinetmaking/Furniture making trade.

Program Requirements

General Education Requirement.....13 credits

ESL 050 Technical English (3) or SS 100 World of Work (3)
MS 104 Technical Math I (4)
CA 100 Computer Literacy (3)
BU 097 Introduction to Entrepreneurship (3)

Technical Requirements.....21 credits

VCF 104 Introduction to Cabinet making/Furniture making (3)
VSP 153a Industrial Safety (1.5)
VCF 106 Plan Reading and Documentation (1.5)
VCF 110 Domestic Construction (3)
VCF 114 Commercial Construction (3)
VCF 120 Workshop Administration (2)
VCF 124 Maintenance and safe use of Basic Static Machines, Power Tools, and Equipments (4)
VCF 132 Surface Preparation and Finishing Techniques (3)

Total Requirements.....34 credits

Suggested Schedule

First Semester

MS 104 Technical Math I 4
ESL050 Technical English or SS 100 World of Work 3
VCF 104 Introduction to Cabinet making/Furniture making 3
VSP 153a Industrial Safety 1.5
VCF 106 Plan Reading and Documentation 1.5
13

Second Semester

VCF 110 Domestic Construction 3
VCF 114 Commercial Construction.....3
VCF 120 Workshop Administration..... 2
VCF 124 Maintenance and safe use of Basic Static Machines, Power Tools, and Equipment 4
VCF 132 Surface Preparation and Finishing Techniques.....3
15

Summer Session

CA 100 Computer Literacy.....3
BU 097 Introduction to Entrepreneurship..... 3
6

Total Requirements .....34 credits

CERTIFICATE OF ACHIEVEMENT in MASONRY

Students will be introduced to masonry materials, tools and safety practices and will gain experience in masonry work, including reinforcement techniques.

Program Learning Outcomes

Upon program completion the successful graduate will be able to competently perform the following skills:

1. Identify safety and occupational health requirements in the building construction industry.
2. Use specified hand and power tools for performing masonry work.
3. Perform basic hand skills in block-laying, surface plastering, and other masonry related skills to a given specification.
4. Interpret information from blue print drawings and technical instructions related to masonry work.
5. Perform a cost estimate in a specified project in the masonry trade.
6. Participate in the masonry profession.

Program Requirement for Certificate in Masonry

General Education Requirements.....13 credits
- ESL 050 Technical English or SS100 World of Work (3)
- MS 104 Technical Math I (4)
- CA 100 Computer Literacy (3)
- BU 097 Introduction to Entrepreneurship (3)

Technical Requirements .....21 credits
- VSP 153a Industrial Safety (1.5)
- VAE 103 Blueprint Sketching and Interpretation (3)
- VCE 195 Construction Procedures (1.5)
- VCT 153 Introduction to Carpentry (3)
- VCT 154 Fundamentals of Masonry (3)
- VCT 163 Concrete Form Construction (3)
- VCT 164 Concrete and Brick Masonry (3)
- VCT 174 Columns, Beams, Walls and Partitions Construction (3)

Total Requirements .....34 credits

Suggested Schedule

Fall Semester

ESL 050 Technical English or SS100 World of Work	3
MS 104 Technical Math I	4
VSP 153a Industrial Safety	1.5
VAE 103 Blueprint Sketching and Interpretation	3
VCT 153 Introduction to Carpentry	3
	14.5

Spring Semester

VCE 195 Construction Procedures	1.5
VCT 154 Fundamentals of Masonry	3
VCT 163 Concrete Form Construction	3
VCT 164 Concrete and Brick Masonry	3
VCT 174 Columns, Beams, Walls and Partitions Construction	3
	13.5

Summer Session

CA 100 Computer Literacy	3

BU 097 Introduction to Entrepreneurship 3

6

Total Requirement: .....34 credits

CERTIFICATE OF ACHIEVEMENT in PLUMBING

Students will be introduced to plumbing maintenance, installation, design considerations and pipefitting for construction. The National Plumbing Code will be referenced for all theory and practice.

Program Learning Outcomes

Upon program completion the successful graduate will be able to competently perform the following skills:

Identify safety and occupational health requirements in the plumbing trade.
Use specified hand and power tools for the plumbing trade.
Interpret information from blue print drawings and technical instructions related to plumbing work.
Perform basic hand skills in pipe fitting, fixtures & faucets installation, and drain & waste system installation in a residential plumbing systems to given specifications.
Perform cost estimate in a specified project in the plumbing trade.
Design and Build a simple residential plumbing system.
Participate in the plumbing profession.

Program Requirements for Certificate in Plumbing

1. General Education Requirements.....13 credits
ESL 050 Technical English (3) **or** SS100 World of Work (3)
MS 104 Technical Math I (4)
CA 100 Computer Literacy (3)
BU 097 Introduction to Entrepreneurship (3)

2. Technical Requirements .....21 credits
VSP 153a Industrial Safety (1.5)
VAE 103 Blueprint Sketching and Interpretation (3)
VCE 195 Construction Procedures (1.5)
VCT 152 Fundamentals of Plumbing (3)
VAE 150 Introduction to Computer Aided Design and Drafting (3)
VCT 162 Advanced Plumbing (3)
VCT 172 Plumbing Installation and Design (3)
VCT 182 Uniform Plumbing Code (3)

Total Credits Required .....34 credits

Suggested Schedule

Fall Semester

ESL 050 Technical English or SS100 World of Work 3
MS 104 Technical Math I 4
VAE 103 Blueprint Sketching and Interpretation 3
VCT 152 Fundamentals of Plumbing 3
VSP 153a Industrial Safety 1.5

14.5

Spring Semester

VCT 162 Advanced Plumbing 3
VCT 172 Plumbing Installation and Design 3
VCT 182 Uniform Plumbing Code 3
VCE 195 Construction Procedures. 1.5
VAE 150 Introduction to Computer Aided Design and Drafting (3). 3
CA 100 Computer Literacy 3
16.5

Summer Session

BU 097 Introduction to Entrepreneurship 3
3

Total Requirements .....34 credits

CERTIFICATE OF ACHIEVEMENT in REFRIGERATION AND AIR CONDITIONING

Students will be introduced to the theory of refrigeration and air-conditioning and given practice in the servicing and repairs of the relevant appliances.

Program Learning Outcomes

Upon program completion the successful graduate will be able to competently perform the following skills:
1. Identify safety and occupational health requirements in the air-conditioning and refrigeration industry.
2. Use specified hand and power tools for refrigeration and air-conditioning.
3. Perform basic hand skills in maintaining refrigeration and air-conditioning systems to given specifications.
4. Read and interpret basic electrical drawing & symbols related to A/C and refrigeration systems.
5. Perform basic troubleshooting and repair to residential A/C units and refrigerators.
Participate in the air-conditioning and refrigeration profession.

Program Requirements for Certificate in Refrigeration and Air Conditioning

General Education Requirements .....14 credits

MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
ESL050 Technical English (3) or SS 100 World of Work (3)
CA 100 Computer Literacy (3)

Technical Requirements .....21 credits

VEM105 Basic Electricity for A/C (3)
VEM110 Workshop Fabrication (3)
VEM111 Electrical Wiring I (3)
VEM113 Refrigeration I (4)
VEM114 Refrigeration II (4)
VWE115 General Welding (4)

Total Credits Required .....35 credits

Suggested Schedule

Fall Semester

ESL 050 Technical English or SS 100 World of Work 3
MS 104 Technical Math I 4
VEM 105 Basic Electricity 6

VEM110 Workshop Fabrication....3
VEM113 Refrigeration I 4
17

Spring Semester
MS 106 Technical Math II 4
VEM111 Electrical Wiring I....3
VEM114 Refrigeration II 4
VWE115 General Welding 4
15

Summer Session
CA 100 Computer Literacy 3
3

Total Requirement: ....35 credits

CERTIFICATE OF ACHIEVEMENT
In
BUILDING MAINTENANCE AND REPAIR

To acquire maintenance skills in various trade disciplines students will participate in this practically oriented program of skill acquisition. The program is designed to give students the skills to succeed in the field of building maintenance.

Program Learning Outcomes

Upon program completion the successful graduate will be able to perform competently in the following skills:
1. Identify safety and occupational health requirements in the Building industry.
2. Use competently specified hand and power tools for air-conditioning carpentry electrical landscaping and plumbing trades.
3. Perform basic hand skills in maintaining air-conditioning, electrical and plumbing systems to given specifications.
4. Perform basic hand skills in maintaining buildings and grounds.
5. Interpret information from blue print drawings.
6. Participate in the building maintenance profession.

Program Requirements for Certificate in Building Maintenance and Repair

General Education Requirements ....10 credits
MS 104 Technical Math I (4)
ESL 050 Technical English **or** SS 100 World of Work (3)
CA 100 Computer Literacy (3)

Technical Requirements ....24.5 credits
VSP 153a Industrial Safety (1.5)
VCT 154 Introduction to Masonry (3)
VWE 115 General Welding (4)
VBM 101 Maintenance I (4)
VBM 102 Maintenance II (4)
VBM 103 Maintenance III (4)
VBM 104 Maintenance IV (4)

Total Requirements ....34.5 credits

Suggested Schedule

Fall Semester
ESL 050 Technical English **or** SS 100 World of Work 3

MS 104 Technical Math I 4
VCT 154 Introduction to Masonry 3
VSP 153a Industrial Safety 1.5
VBM 101 Maintenance I 4
15.5

Spring Semester
VBM 102 Maintenance II 4
VBM 103 Maintenance III 4
VWE 115 General Welding 4
CA 100 Computer Literacy 3
15

Summer Session
VBM 104 Maintenance IV.....4
4

Total Requirements.....34.5 credits

CERTIFICATE OF ACHIEVEMENT
in
SMALL ENGINE, EQUIPMENT and OUTBOARD MOTOR REPAIR

Students will be introduced to small engines operation; and will be given practice on maintenance, repair and troubleshooting small engines.

Program Requirements

General Education Requirements .....14 credits
MS 104 Technical Math I (4)
MS 106 Technical Math II (4)
ESL 050 Technical English or SS 100 World of Works (3)
CA 100 Computer Literacy (3)

Technical Requirements.....17.5 credits
VSP 153a Industrial Safety (1.5)
VSM 101 Introduction to Small Engine Repair (4)
VSM 102 Fuel, Lubrication, Carburetor, and Ignition (4)
VSM 103 Engine Dismantling, Inspection, and Assembly (4)
VSM 104 Starters, Engine Maintenance, and Troubleshooting (4)
BU 097 Introduction to Entrepreneurship (3)

Total Credits Required..... 34.5 credits

Suggested Schedule

Fall Semester
ESL 050 Technical English..... 3
MS 104 Technical Mathematics I 4
VSP 153a Industrial Safety 1.5
VSM 101 Introduction to Small Engine Repair..... 4
12.5

Spring Semester
CA 100 Computer Literacy 3
MS 106 Technical Mathematics II 4
VSM 102 Fuel, Lubrication, Carburetor, and Ignition 4
VSM 103 Engine Dismantling, Inspection, and Assembly 4
BU 097 Introduction to Entrepreneurship 3
18

Summer Session
VSM 104 Starters, Engine Maintenance, and Troubleshooting 4
4

Total Requirements..... 34. 5 credits

CERTIFICATE OF ACHIEVEMENT in CAREER EDUCATION

The certificate programs in career education are designed for those who wish to enter a trade but who also wish to broaden their education and open the possibility of future study.

In these programs the emphasis will be on practical training designed to satisfy the requirements of the basic and intermediate skill levels as specified under the Pacific Regional Trade Testing Scheme and administered by the Trade Training and Testing Unit. The program will be offered in a partnership agreement between that body and the College.

Depending on the trade area chosen, the title of the Certificate conferred will be followed in brackets by the relevant identifier as set out in the Technical Requirements section below.

Program Learning Outcomes

Upon program completion the successful graduate will be able to competently perform the following skills:
1. Identify safety and occupational health requirements in the specific trade area being studied.
2. Use specified hand and power tools.
3. Read and interpret information from technical drawings related to the respective trade.
4. Perform hand skills in their respective trades.
5. Participate in the respective trade.
6. Successfully pass the theoretical and practical exams (Basic and Intermediate Level) as specified under the Pacific Regional Trade Testing Scheme.

Program Requirements

General Education Requirements .....13 credits
- ESL 050 Technical English (3)
- MS 104 Technical Math I (4)
- CA 100 Computer Literacy (3)
- BU 097 Introduction to Entrepreneurship (3)

Technical Requirements .....22 credits
- Classroom (12 credits)
- Practicum (10 credits)
- Take one of the following trade areas:
- VTC Carpenter
- VTJ Joiner
- VTB Blocklayer/plasterer
- VTP Plumber
- VTE Electrician
- VTRRefrigeration/Air-conditioning
- VTL Linesman
- VTPH Power House Operator
- VTM Motor Vehicle Mechanics
- VTH Heavy Plant Mechanics
- VTDE Diesel Engine Fitter
- VTW Welder
- VTPB Panel Beater
- VTAE Automotive Electrician

Programs in the above trade areas are not always available, but are only offered on demand when qualified instructors and appropriate facilities are available.

Total Credits Required .....35 credits

Suggested Schedule

First Semester
ESL 050 Technical English 3
MS 104 Technical Math I 4
Classroom 6
Practicum 3
16

Second Semester
CA 095Basic Computer Applications 3
BU 097 Introduction to Entrepreneurship 3
Classroom 6
Practicum 3
15

Summer Session
Practicum 4
4

Total Requirements .....35 credits

CERTIFICATE OF ACHIEVEMENT in CAREER EDUCATION
(Emphasis: Motor Vehicle Mechanics)

This program is designed to develop an understanding of the basic purpose, construction, operation and service of component parts and assemblies of an automobile. Students will develop the knowledge and skills required to disassemble, inspect, reassemble and perform basic repairs and maintenance on motor vehicle units and components

Program Requirements

General Education Requirements .....13 credits
- ESL 050 Technical English (3)
- MS 104 Technical Mathematics I (4)
- CA 100 Computer Literacy (3)
- BU 097 Introduction to Entrepreneurship (3)

Technical Requirements.....22 credits
- VTM 101 Introduction to Motor Vehicle Mechanics (4)
- VTM 102 Fuel, Engine Cooling and Power Train Systems (4)
- VTM 103 Ignition, Electrical and Transmission Systems (4)
- VTM 104 Brakes, Steering, Suspension and Wheel Alignment (4)
- VTM 150 Cooperative Education (6)

Total Requirements.....35 credits

Apprenticeship Training Program Related Instruction Schedule

AIRCONDITION REFRIGERATION MECHANIC

First Year
VEM 101 Basic Air Conditioning (3)
MS 104 Technical Math I (4)
VSP 121 Industrial Safety Electrical/Electronic (1.5)
ESL 050 Technical English (3) or SS 100 World of Work (3)

Second Year
MS 106 Technical Math II (4)
VEM 105 Basic Electricity for A/C & Refrigeration Mechanics (6)
VAE 103 Blueprint Sketching and Interpretation (3)

Third Year
VEM 113 Refrigeration I (3)
VEM 114 Refrigeration II (3)
VEM 111 Electrical Wiring (3)

Fourth Year
VEM 115 Refrigeration III (3)
VAE 150 Introduction to Computer Aided Design and Drafting (3)
VWE 105 Fundamentals of Oxyacetylene Welding and Cutting (3)

CARPENTER

First Year
VCT 153 Introduction to Carpentry (3)
VSP 153a Industrial Safety (1.5)
MS 104 Technical Math I (4)
ESL 050 Technical English (3) or SS 100 World of Work (3)

Second Year
VAE 103 Blueprint Sketching and Interpretation (3)
VCT 163 Concrete Form Construction (3)
VCT 173 Rough Framing (3)

Third Year
VCT 174 Columns, Beams, Walls and Partitions (3)
VCT 183 Finishing and Trim Work (3)
VCT 195 Construction Procedures (3)

Fourth Year
VAE 150 Introduction to Computer Aided Design and Drafting (3)
VAE 138 Building Codes, Specification and Construction Management (3)
VCT 215 Building Technology I (3)

ELECTRICIAN

First Year
VEM 102 Electrical/Electronic Drawing and Sketching (1.5)
VSP 121 Industrial Safety Electrical/Electronic (1.5)
MS 104 Technical Math I (4)
ESL 050 Technical English (3) or SS 100 World of Work (3)

Second Year
MS 106 Technical Math II (4)
VEM 103 Basic Electricity I (4)
VEM 110 Workshop Fabrication/Hand and Power Tool Skills (3)

Third Year
VEM 104 Basic Electricity II (5)
VEM 111 Electrical Wiring I (3)
VEM 112 Electrical Wiring II (3)

Fourth Year
VEM 212 National Electrical Code NFPA U.S. Standard (3)
VEE 266 Rotating Machinery (3)
VEM 113 Refrigeration I (3)

MAINTENANCE REPAIR, BUILDING

First Year
VCT 153 Introduction to Carpentry (3)
VSP 153a Industrial Safety (1.5)
MS 104 Technical Math I (4)
ESL 050 Technical English or SS 100 World of Work (3)

Second Year
VEM 101 Basic Air Conditioning (3)
VBM 102 Maintenance II (4)
VAE 103 Blueprint Sketching and Interpretation (3)

Third Year
VWE 105 Fundamentals of Oxyacetylene Welding and Cutting (3)
VCT 152 Fundamentals of Plumbing (3)
VCT 183 Finishing and Trim Work (3)

PLUMBER

First Year
VCT 152 Fundamentals of Plumbing (3)
VSP 153a Industrial Safety (1.5)
MS 104 Technical Math I (4)
ESL 050 Technical English or SS 100 World of Work (3)

Second Year
VBM 101 Building Maintenance I (6)
VBM 102 Building Maintenance II (6)

Third Year
VCT 162 Advanced Plumbing (3)
VCT 172 Plumbing Installation & Design (3)
VCT 182 Uniform Plumbing Code (3)

Fourth Year
VAE 103 Blueprint Sketching and Interpretation (3)
VWE 105 Fundamentals of Oxyacetylene Welding and Cutting (3)
VWE 110 Fundamentals of Arc Welding (3)