

Career & Technical Education



CAREER AND TECHNICAL EDUCATION CERTIFICATE PROGRAMS

Career and Technical Education Certificate Programs provide students with the skills necessary to obtain entrance level employment in the field of their educational program. The following programs generally run for one to four semesters depending on the student's interests and objectives.

Students with previous occupational courses in high school or training in military services, or training via some other source may be given allowance for credit or advanced standing in the Career and Technical Education program of their choice.

Training includes job skill development as well as the necessary related technical information necessary to enhance an individual's productivity in the world of work.

Agri-Business Management

Planning & Financial Records
Financial Analysis
Marketing & Risk Management
Advanced Ag Business Management
Rural Business Entrepreneurship
Young Farmers

Automotive Technology

Automotive Service Technician
Automatic Transmission and Transaxle
Brakes
Electrical/Electronic Systems
Engine Performance
Engine Repair
Heating and Air Conditioning
Manual Drive Train and Axles
Suspension and Steering

Business

Accounting
Entrepreneurship
Office Application Specialist

Computer Systems Technologies

Computer and Network Technicians
Web Development
Advanced Web Development

Cosmetology

Cosmetologist
Hair Stylist
Nail Technician
Esthetician

Early Childhood Education

Group Leader
Infant/Toddler
Pre-School
Before & After School
Director

Emergency Medical Services

EMT Basic
EMT Intermediate

Law Enforcement

Mechanical Graphics and Design

Medical Office Clerk

Nursing

Practical Nursing

Real Estate

Small Business Management

Small Business Planning
Records & Computerization
Financial Analysis & Planning
Marketing & Risk Management
Marketing & E-Commerce

Water Quality Management Technology

Water Treatment
Wastewater Treatment

Certificate Programs

The programs outlined on the following pages are for guidance of students and advisors; they may be changed only on approval.

Minimum Competency Standards for Program Admission

Otero Junior College uses the results of a basic skills assessment test (Accuplacer) to direct students into appropriate English, reading and mathematics course(s) and to advise students in the selection of other courses. Prior to enrollment, all new students must complete an assessment. Research on Colorado's basic skills assessment programs indicates that new students who follow assessment-related advice have a much higher chance of academic success than those who do not. Please refer to information in the Mandatory Basic Skills Assessment and Placement section of this catalog.

Certificate Requirements

- A. Students must pass all program courses with a minimum grade of "C".
- B. Completion of 16 semester hours or one-half of the certificate requirements from Otero Junior College.
- C. Complete the Application for Graduation form by the end of the first week of final semester.
- D. Meet all financial obligations to the College.

General Information

Career and Technical Education programs are designed to prepare students for immediate employment. Many of these courses are equivalent to college level academic course offerings and may be accepted by some college disciplines later if the student decides to transfer to a four year institution.

Gainful Employment Resource Information

The US Department of Education requires colleges to disclose a variety of information for any financial aid eligible program that prepares students for gainful employment in a recognized occupation. The information provided at the following web link is the best available to us but represents one year's data only.

www.ojc.edu/CertificatePrograms.aspx

Click on the specific program you are interested in to learn more about salaries and future employment projections. If you have any questions regarding the data provided contact OJC Student Services at 719-384-6831.

The listing of a course or program in this or any other college publication does not constitute a guarantee, nor contract, that the particular course or program will be offered during the time listed. All courses or programs are subject to scheduling changes or cancellations. Every effort to inform students of such changes and/or cancellations will be made.

AGRI-BUSINESS MANAGEMENT

Enhancing the business management skills of area farm and ranch producers and operators in agri-related business is the purpose of the multi-year certificates offered by OJC's Agri-Business Management program. Emphasis will be placed on developing computerized records which will enable students to analyze the profitability of their over-all operations as well as each identified profit centers. Students enrolling in the certificate programs must be actively operating a farm/ranch and/or agricultural related business, or have the desire to start an agriculture business. Students must have the approval of the instructor.

The program is administered by three methods; classroom instruction, which includes guided online studies, home-visit instruction where an instructor comes to student's home, and cooperative learning. Certificates range from record keeping to marketing to complete advanced business plans.

Upon completion of the certificate programs, a four-credit class, Young Farmer, is available for those students who desire additional site support and future instruction. Courses may be available based on demand.

Ag Business Planning and Financial Records Certificate

ABM 111 Records and Business Planning I	9
ABM 112 Records and Business Planning II	9

Ag Business Financial Analysis Certificate

ABM 121 Financial Analysis I	9
ABM 122 Financial Analysis II	9

Ag Business Marketing and Risk Management Certificate

ABM 131 Commodity Marketing I	9
ABM 132 Commodity Marketing II	9

ABM 135 Marketing and Risk Management I	9
ABM 136 Marketing and Risk Management II	9

ABM 137 Web Production/Utilization I	9
ABM 138 Web Production/Utilization II	9

Advanced Ag Business Management Certificate

ABM 141 Advanced Business Management I	9
ABM 142 Advanced Business Management II	9

ABM 143 Integrated Management I	9
ABM 144 Integrated Management II	9

AGRI-BUSINESS MANAGEMENT

Rural Business Entrepreneurship Certificate

ABM 151 Rural Business Entrepreneurship I	.9
ABM 152 Rural Business Entrepreneurship II	.9
ABM 153 Leadership/Human Resource Management I	.9
ABM 154 Leadership/Human Resource Management II	.9

Young Farmers Certificate

ABM 175 Special Topics: Young Farmers	4
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AUTOMOTIVE SERVICE TECHNICIAN

This two-year certificate program is designed to allow the enrollment of secondary and/or postsecondary students. Students will be provided the opportunity to develop sufficient skills in order to perform current vehicle maintenance and repair. Tune-up, electrical systems, and the overhaul of engines and transmissions will be included in the program. Otero Junior College's program has been awarded full NATEF (National Automotive Technicians Education Foundation, Inc.) accreditation.

First Year

	Fall	Spring
ASE 160 Auto Engine Removal & Installation	.1	
ASE 161 Engine, Disassembly Diagnosis & Assembly	.5	
ASE 150 U-Joint & Axle Shaft Services	.2	
ASE 151 Manual Transmissions/Transaxles & Clutches	.2	
ASE 152 Differentials & 4WD/AWD Service	.2	
ASE 140 Suspension and Steering I		.3
ASE 240 Suspension and Steering II		.3
ASE 250 Automatic Transmission/Transaxles Service		.1
ASE 251 Automatic Transmission/Transaxles Diagnosis		.5

Second Year

	Fall	Spring
ASE 130 General Engine Diagnosis	.2	
ASE 132 Ignition System Diagnosis & Repair	.2	
ASE 134 Automotive Emissions	.2	
ASE 233 Fuel Injection and Exhaust Systems	.4	
ASE 235 Driveability Diagnosis	.1	
ASE 110 Brakes I	.3	
ASE 210 Brakes II	.3	
ASE 120 Basic Automotive Electricity		.2
ASE 123 Auto Battery, Starting & Charging Systems		.2
ASE 220 Specialized Electronics Training		.2
ASE 221 Automotive Body Electrical		.4
ASE 231 Automotive Computers		.2
ASE 265 Automotive Heating and Air Conditioning		.5

AUTOMOTIVE TECHNOLOGY

Fall-First Year

Engine Repair Certificate

ASE 160	Auto Engine Removal & Installation	1
ASE 161	Engine, Disassembly Diagnosis & Assembly	5

Manual Drive Train and Axles Certificate

ASE 150	U-Joint & Axle Shaft Services	2
ASE 151	Manual Transmissions/Transaxles & Clutches	2
ASE 152	Differentials & 4WD/AWD Service	2

Spring-First Year

Automatic Transmission and Transaxle Certificate

ASE 250	Automatic Transmission/Transaxle Service	1
ASE 251	Automatic Transmission/Transaxles Diagnosis	5

Suspension and Steering Certificate

ASE 140	Suspension and Steering I	3
ASE 240	Suspension and Steering II	3

Fall-Second Year

Engine Performance Certificate

ASE 130	General Engine Diagnosis	2
ASE 132	Ignition System Diagnosis & Repair	2
ASE 134	Automotive Emissions	2
ASE 233	Fuel Injection and Exhaust Systems	4
ASE 235	Driveability Diagnosis	1

Brakes Certificate

ASE 110	Brakes I	3
ASE 210	Brakes II	3

Spring-Second Year

Electrical/Electronic Systems Certificate

ASE 120	Basic Automotive Electricity	2
ASE 123	Auto Battery, Starting & Charging Systems	2
ASE 220	Specialized Electronics Training	2
ASE 221	Automotive Bodies Electrical	4
ASE 231	Automotive Computers	2

Heating and Air Conditioning Certificate

ASE 265	Automotive Heating and Air Conditioning	5
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BUSINESS

Accounting Certificate

The Accounting emphasis will prepare students for entry level employment for general accounting tasks such as accounts payable and receivable, payroll, billing, and computerized accounting.

		Fall	Spring
ACC 101	Fundamentals of Accounting	3	
BTE 108	Ten-Key by Touch	1	
BUS 115	Introduction to Business	3	
BUS 216	Legal Environment of Business	3	
CIS 118	Intro to PC Applications	3	
MAN 102	Business Ethics & Values	1	
ACC 115	Payroll Accounting		3
ACC 125	Computerized Accounting		3
BTE 225	Administrative Office Management		3
BTE 287	Cooperative Ed/Internship		1
CIS 155	PC Spreadsheet Concept		3
MAR 160	Customer Service		3

Entrepreneurship Certificate

The Entrepreneurship emphasis will prepare students to operate or own a small business. Students will develop an understanding of managing a business which includes being able to make legal, ethical, financial, and marketing decisions.

		Fall	Spring
ACC 121	Principles of Accounting I	4	
BUS 115	Introduction to Business	3	
BUS 120	Intro to E-Commerce	3	
CIS 118	Intro to PC Applications	3	
MAN 102	Business Ethics & Values	1	
ACC 122	Principles of Accounting II		4
BUS 216	Legal Environment of Business		3
MAN 216	Small Business Management		3
MAN 226	Principles of Management		3
MAR 160	Customer Service		3

Office Applications Specialist Certificate

Office Application Specialist emphasis will prepare students to be proficient in operating commercial software packages in word processing, spreadsheets, databases, and accounting. In addition, this program will aid students in the development of skills in customer service as well as business ethics and values that is needed for successful employment in the business world.

		Fall	Spring
ACC 101	Fundamentals of Accounting	3	
BTE 100/108	Computerized Keyboarding or Ten-Key by Touch	1	
BUS 115	Introduction to Business	3	
CIS 118	Intro to PC Applications	3	
CIS 135	Complete PC Word Processing	3	
MAN 102	Business Ethics & Values	1	
ACC 125	Computerized Accounting		3
BTE 225	Administrative Office Management		3
BTE 287	Cooperative Ed/Internship		1
CIS 145	Complete PC Database		3
CIS 155	PC Spreadsheet Concepts		3
MAR 160	Customer Service.		3



COMPUTER SYSTEMS TECHNOLOGIES

The Computer Systems Technologies program provides an opportunity for students to obtain certificates that signify their competence in the field of computer technology.

Computer and Network Technician Certificate

The certificate options offer students a comprehensive education that includes skills with computer hardware, networking, software (Operating Systems and Applications), and security.

		Fall	Spring
CNG 101	Intro to Networking	3	
CNG 116	Microcomputer Hardware	3	
CNG 131	Network Security Fundamentals	3	
CNG 109	Basic Computer Networking	3	
CNG 289	Capstone		9
ENG 115	Technical English and Communication		3

Web Development Certificate

This certificate is designed for students desiring to learn how to create web sites for companies. The technical part of creating web pages and using tools to design is the focus of this program.

		Fall	Spring
CWB 130	Web Editing Tools	3	
ART 150	Digital Art Foundations I	3	
CWB 110	Complete Web Authoring		3
CNG 280	Internship		1

Advanced Web Development Certificate

This certificate is designed to prepare students for an entry-level position in Internet Web development with a focus on the programming aspects of websites. Course offerings provide a mix of programming and applications that examine both the client and server aspects of websites.

		Fall	Spring
CWB 130	Complete Web Editing	3	
ART 150	Digital Art Foundations I	3	
BUS 120	Intro to E-Commerce	3	
CSC 160	Computer Science I (Java Programming)	4	
CWB 110	Complete Web Authoring		3
CSC 161	Computer Science II (Java Programming)		4

COSMETOLOGY - Cosmetologist (70 Total Credits)

This three-semester program provides training in hair, skin, and nail care services. Instruction is provided in hair cutting, hair styling, hair coloring, chemical texture services, skin care, waxing services, make-up application, and nail care needs.

The Colorado Office of Barber and Cosmetology Licensure regulates the standards of conduct for cosmetologists, hairstylists, barbers, estheticians, and manicurists. The Cosmetology Career Academy at Otero Junior College prepares students for Colorado Barber and Cosmetology licensure.

Fall Semester - 25 Credits

COS 103	Shampoo/Rinses/Conditioners I	1
COS 110	Intro to Hair Coloring	2
COS 120	Intro to Hair Cutting	2
COS 130	Intro to Hair Styling	2
COS 140	Intro to Chemical Texture	1
NAT 110	Intro to Manicures & Pedicures	3
COS 160	Intro to Disinfection, Sanitation, & Safety	2
COS 121	Intermediate I: Hair Cutting	2
COS 131	Intermediate I: Hair Styling	2
COS 141	Intermediate I: Chemical Texture	1
COS 111	Intermediate I: Hair Coloring	2
COS 161	Intermediate I: Disinfection, Sanitation & Safety	1
COS 150	Laws, Rules and Regulations	1
COS 289	Cosmetology Preparation for State Board	3

Spring Semester - 25 Credits

COS 203	Shampoo/Rinses/Conditioners II	1
NAT 111	Intermediate Manicures & Pedicures	2
COS 210	Intermediate II: Hair Coloring	2
COS 220	Intermediate II: Hair Cutting	2
COS 230	Intermediate II: Hair Styling	2
COS 240	Intermediate II: Chemical Texture	1
COS 260	Intermediate II: Disinfection, Sanitation & Safety	2
EST 110	Intro to Facials & Skin Care	3
EST 111	Intermediate Facials & Skin Care	2
EST 211	Facial Makeup	1
EST 212	Hair Removal	3
EST 230	Esthetician Preparation for State Board Exam	3
COS 261	Advanced Disinfection, Sanitation & Safety	1

Summer Semester - 20 Credits

COS 211	Advanced Hair Coloring	2
COS 221	Advanced Hair Cutting	2
COS 231	Advanced Hair Styling	1
EST 210	Advanced Massage & Skin Care	2
COS 241	Advanced Chemical Texture	1
NAT 210	Advanced Manicures & Pedicures	2
NAT 211	Application of Artificial Nails	5
NAT 230	Nail Technician Preparation for State Board	3
COS 250	Mgmt, Ethics, Interpersonal Skills & Salesmanship	1
COS 279	Cosmetology Occupations	1

COSMETOLOGY

HAIR STYLIST (50 Total Credits)

This two-semester certificate program provides training in hair care. Instruction is provided in hair cutting, hair styling, hair coloring, and chemical textures services.

Fall Semester - 25 Credits

COS 103	Shampoo/Rinses/Conditioners I	1
COS 110	Intro to Hair Coloring	2
COS 120	Intro to Hair Cutting	2
COS 130	Intro to Hair Styling	2
COS 140	Intro to Chemical Texture	1
COS 160	Intro to Disinfection, Sanitation & Safety	2
COS 121	Intermediate I: Hair Cutting	2
COS 131	Intermediate I: Hair Styling	2
COS 141	Intermediate I: Chemical Texture	1
COS 111	Intermediate I: Hair Coloring	2
COS 161	Intermediate I: Disinfection, Sanitation & Safety	1
COS 260	Intermediate II: Disinfection, Sanitation & Safety	2
COS 150	Laws, Rules and Regulations	1
COS 250	Mgmt, Ethics, Interpersonal Skills & Salesmanship	1
COS 289	Cosmetology Preparation for State Board	3

Spring Semester - 25 Credits

COS 203	Shampoo/Rinses/Conditioners II	1
COS 210	Intermediate II: Hair Coloring	2
COS 220	Intermediate II: Hair Cutting	2
COS 230	Intermediate II: Hair Styling	2
COS 240	Intermediate II: Chemical Texture	1
COS 211	Advanced Hair Coloring	2
COS 221	Advanced Hair Cutting	2
COS 231	Advanced Hair Styling	1
COS 261	Advanced Disinfection, Sanitation & Safety	1
COS 262	Advanced II: Disinfection, Sanitation & Safety	3
COS 289	Cosmetology Preparation for State Board	3
COS 241	Advanced Chemical Texture	1
COS 288	Cosmetology Practicum	4

COSMETOLOGY

NAIL TECHNICIAN 20 - Total Credits

This one-semester certificate program provides training in nail care. Instruction is provided in manicuring, pedicure, nail design extensions, and nail artistry.

Summer Semester Only

NAT 110	Intro to Manicures & Pedicures	3
NAT 111	Intermediate Manicures & Pedicures	2
NAT 210	Advanced Manicures & Pedicures	2
NAT 211	Application of Artificial Nails	5
COS 150	Laws, Rules & Regulations	1
COS 250	Management, Ethics, Interpersonal Skills & Sales	1
COS 160	Intro to Disinfection Sanitation & Safety	2
COS 161	Intermediate I: Disinfection, Sanitation & Safety	1
COS 260	Intermediate II: Disinfection, Sanitation & Safety	2
COS 261	Advanced Disinfection, Sanitation & Safety	1

ESTHETICS 24 - Credits

Esthetics classes are held two days a week in Spring and Summer Semesters.

Spring Esthetics Courses -12 credits

EST 110	Intro to Facials & Skin Care	3
EST 111	Intermediate Facials & Skin Care	2
EST 211	Facial Makeup	1
EST 212	Hair Removal	3
COS 160	Intro to Disinfection, Sanitation & Safety	2
COS 150	Laws, Rules and Regulations	1

Summer Esthetics Courses - 12 credits

EST 210	Advanced Massage & Skin Care	2
COS 250	Mgmt, Ethics, Interpersonal Skills & Salesmanship	1
COS 260	Intermediate II: Disinfection, Sanitation & Safety	2
COS 261	Advanced Disinfection, Sanitation & Safety	1
COS 262	Advanced II: Disinfection, Sanitation & Safety	3
EST 230	Esthetician Preparation for State Board	3
*EST 290	Professional Development/Continuing Education	3

*If student is already licensed as Cosmetologist or Esthetician or is looking for advanced training. EST 290 would replace EST 230 in the Esthetician course plan.

EST 290 would be a two day training where students would receive equipment training on Day 1 and bring in three models on Day 2 and work with Micro Dermabrasion machine for state wide certification.

EARLY CHILDHOOD EDUCATION

The certificates apply towards group leader and director certificates or an AAS degree. Many of the classes offered in these five certificates can be applied toward the Colorado Department of Human Services, Division of Child Care licensure for either a group leader and/or director of a large child care center. Hands on lab hours are required in each certificate.

Director Certificate

A Director Certificate issued by the Colorado Department of Human Services, Department of Child Care, qualifies the recipient to be the Director of a Large Child Care facility. A candidate for this type of certification by the State must have an AAS degree or at least 24 college credits and work experience as a group leader with children under 12 years of age. **

	Fall	Spring
ECE 101 Introduction to the Early Childhood Education	3	
ECE 102 Intro. to Early Childhood Lab Techniques	3	
ECE 103 Guidance Strategies for Children	3	
ECE 241 Administration: Human Relations for ECE	3	
ECE 111 Infant and Toddler Theory and Practice		3
ECE 112 Intro to Infant/Toddler Lab Techniques		3
ECE 205 Nutrition, Health and Safety		3
ECE 220 Curriculum Development: Methods/Techniques		3
ECE 240 Admin. of Early Childhood Care and Education		3
PSY 238 Child Development	3	or 3

Group Leader Certificate

A Group Leader is responsible for a single group of children, working under the supervision of a director. This group leader status enables the holder to be left alone with a group of children within the guidelines of adult child ratio. **

	Fall	Spring
ECE 101 Introduction to the Early Childhood Education	3	
ECE 102 Intro to Early Childhood Lab Techniques	3	
ECE 103 Guidance Strategies for Children	3	
ECE 225 Language and Cognition for the Young Child	3	
ECE 226 Creativity and the Young Child	3	
ECE 111 Infant and Toddler Theory and Practice		3
ECE 112 Intro to Infant/Toddler Lab Techniques		3
ECE 205 Nutrition, Health and Safety		3
ECE 220 Curriculum Development: Methods/Techniques		3

The following certificates are an accumulation of course work and hours towards the Associate of Applied Science, director or group leader certificates.

Infant/Toddler Certificate

	Fall	Spring
ECE 103 Guidance Strategies for Children	3	
ECE 111 Infant and Toddler Theory and Practice		3
ECE 112 Intro to Infant/Toddler Lab Techniques		3
ECE 205 Nutrition, Health and Safety		3
ECE 220 Curriculum Development: Methods/Techniques		3

Pre-School Certificate

	Fall	Spring
ECE 101 Introduction to the Early Childhood Education	3	
ECE 102 Intro to Early Childhood Lab Techniques	3	
ECE 103 Guidance Strategies for Children	3	
ECE 226 Creativity and the Young Child	3	
ECE 125 Science/Math for the Young Child		3
ECE 205 Nutrition, Health and Safety		3

Before and After School Care Certificate

	Fall	Spring
ECE 103 Guidance Strategies for Children	3	
ECE 225 Language and Cognition for the Young Child	3	
ECE 125 Science/Math for the Young Child		3
ECE 205 Nutrition, Health and Safety		3
ECE 220 Curriculum Development: Methods/Techniques		3
PSY 238 Child Development		3

** See Colorado Rules Regulating Child Care Centers for options to be director qualified and group leader qualified. For additional information call (303) 866-5958.

EMERGENCY MEDICAL SERVICES

The Emergency Medical Services certificate programs provide instruction for EMT Basic and EMT Intermediate. Successful completion of the OJC emergency medical training programs' requirements for graduation will also entitle the graduate to submit an application to the National Registry of Emergency Medical Technicians (NREMT) for EMT Basic or EMT Intermediate certification.

EMT Basic Certificate

EMS 125	EMT Basic	9
HPR 102	CPR for Professionals	0.5

EMT Intermediate Certificate

EMS 203	EMT Intermediate I	6
EMS 205	EMT Intermediate II	6
EMS 270	Clinical: EMS Intermediate	3
EMS 282	EMT Intermediate Internship	2

LAW ENFORCEMENT TRAINING ACADEMY

The Law Enforcement Training Academy prepares individuals to successfully sit for the Colorado P.O.S.T. (Peace Officer Standards and Training) Certification Examination, a necessary requirement to becoming a peace officer in Colorado. The Academy is staffed with experienced and professional law enforcement instructors with years of street and instructional experience.

This is a one-semester intensive peace officer certification program that provides tried-and-true police procedures plus exposure to the latest innovations and technologies. The Academy offers additional training necessary for today's entry level Peace Officer. Law enforcement training academy applicants cannot have any felony convictions, domestic violence convictions, child support violations of the Child Support Enforcement Act or military separation with any less than honorable conditions. Applicants with any section 24-31-305, Colorado Revised Statute convictions, theft or any moral turpitude convictions, must have a Colorado POST Rule 7 Variance prior to submitting an application.

The application process for the Law Academy: possess a high school diploma or GED, hold a valid driver's license, complete the OJC application process including the FAFSA (financial aid), apply for Colorado Opportunity Funds, complete the Law Enforcement Academy Registration Packet including two letters of recommendations, submit a completed POST fingerprint background check impression card and complete the academy pre-admission interview with the director.

Prospective students are encouraged to visit the Law Enforcement Training Academy website at <http://www.ojc.edu/lawacademy.aspx>. To request a Law Academy Student Information Packet from the Otero Junior College Student Services call 719-384-6831 or contact the Academy Director at 719-384-6867 or Miner.Blackford@ojc.edu

LEA 101	Basic Police Academy I	6
LEA 102	Basic Police Academy II	12
LEA 105	Basic Law	8
LEA 106	Arrest Control Techniques	3
LEA 107	Law Enforcement Driving.	3
LEA 108	Firearms.	3
LEA 175	Special Topics: Career Management.	1
LEA 175	Special Topics: Roadside Sobriety	1
LEA 175	Special Topics: Command Spanish.	1
LEA 175	Special Topics: Heartsmart First Aid	0.5
LEA 175	Special Topics: OC Spray	0.5
LEA 175	Special Topics: Anti-Bias Policing	0.5
LEA 175	Special Topics: TASER	0.5

MECHANICAL GRAPHICS AND DESIGN

The Mechanical Graphics and Design certificate program builds foundational design skills for a broad range of industrial careers. The program provides general mechanical engineering technology fundamentals with emphasis in the design and development of products and machines. Machinery will be animated for motion analysis, strength calculations will be performed, and the basics of AC & DC electricity will be introduced. Students will develop strong analytic and problem-solving skills by applying the principles learned in class to hands-on projects and real-world applications.

Mechanical Graphics and Design Certificate

Freshman Year

		Fall	Spring
CAD 256	SolidWorks Basics	6	
MAT 107	Career Mathematics	3	
	Or any 100 level math or higher		
CAD 257	SolidWorks Intermediate.	6	
EIC 105	Basics of AC & DC Electricity	4	

Advanced Mechanical Graphics and Design Certificate

Freshman Year

		Fall	Spring
CAD 256	SolidWorks Basics	6	
MAT 107	Career Mathematics	3	
	Or any 100 level math or higher		
CAD 257	SolidWorks Intermediate.	6	
EIC 105	Basics of AC & DC Electricity	4	

Sophomore Year

PHY 105	Conceptual Physics	4	
ENT 133	Intro to Mechanical Design	3	
EGT 230	Drafting and Design I.	6	
ENT 256	Rapid Product Development	4	

MEDICAL OFFICE CLERK

This program is designed to perform administrative and clinical duties in the medical offices and/or medical facilities.

		Fall	Spring
ACC 101	Fundamentals of Accounting	3	
BTE 108	Ten Key by Touch	1	
BTE 100	Computer Keyboarding	1	
CIS 118	Intro to Computer Applications	3	
CIS 135	Complete Word	3	
MOT 208	Intro to CPT-4	2	
HPR 106	Law & Ethics for Health Professionals	2	
HPR 178	Medical Terminology	2	
CIS 155	PC Spreadsheet Concepts.	3	
BTE 225	Administrative Office Management	3	
MOT 132	Medical Transcription.	4	
MOT 209	Intro to ICD-9.	2	
BTE 287	Cooperative Education/Internship	1	



NURSING



PRACTICAL NURSING

The Practical Nursing Certificate exit option is designed to provide education to prepare the student for practice as a licensed practical nurse after completion of the first two semesters of the ADN RN program. Upon admission to the nursing program the student may opt to stop after the first two semesters and take the optional Transition into Practical Nursing course and receive a Certificate of Practical Nursing. The curriculum follows the criteria for the Colorado Nursing Articulation Model and is specifically constructed to promote career mobility between Nursing educational levels.

Successful completion of the Practical Nursing Certificate requirements for graduation also entitles the graduate to submit an application to the State Board of Nursing for the State Licensure Examination for Practical Nursing.

OJC Nursing Admission Procedure

1. Obtain general college admission to Otero Junior College. Submit a completed application at the Student Services Office on the OJC campus or on-line at www.ojc.edu. Student must be a high school graduate or have a GED certificate.
2. Complete required pre-admission courses (Pre-requisite Courses) with a grade of C or higher for each course and a cumulative Grade Point Average (GPA) of 2.5 or higher for the five listed courses. The science course must be completed within seven years of the start date of the program.
3. Apply to the nursing program at OJC using the Online Application available at www.ojc.edu/nursingApplication.aspx
4. Provide official transcripts confirming completion of Pre-requisite courses and GPA to the OJC Nursing Department.
5. Clear Criminal background check and urine drug screen (to be completed when instructed by the OJC Nursing Department). See the Disqualifying Offences document for more information at www.ojc.edu/content/nursing/Disqualifying_Offenses09.pdf.
6. Upon notification of admission to start the nursing program, complete the remaining clinical requirements –i.e. physical exam, hepatitis B and varicella vaccinations etc. (specific forms and instructions will be included in the notification letter).

For more information contact the OJC Nursing Department at 719-384-6898.

Graduation Requirements

- A. Students must fulfill all requirements of the College for receiving a certificate of completion.
- B. The graduate of nursing must pass all courses with a minimum grade of "C"
- C. Graduates must be competent in calculations of medications. Students are required to pass a medication proficiency examination at 100% mastery in order to progress to the summer semester of the program. (See the Nursing Student manual for further information).

Legal Requirements for Practical Nursing Licensure

Before becoming licensed, students must answer the following questions:

- A. "Have you ever been convicted of a crime or have you ever accepted a court plea of guilty or nolo contendere? Have you received a deferred judgment or deferred prosecution?"
- B. "Are you now, or were you for the 12 months preceding the date of this application, addicted to any controlled substance; a regular user of any controlled substance without a prescription; and/or habitually intemperate in the use of intoxicating liquor?"

If any question is answered "yes," students need to meet with the director of the Nursing Department for counseling because the Colorado State Board of Nursing has specific requirements for licensure.

PRACTICAL NURSING

Traditional Schedule

Subject to change without notification. Contact the OJC Nursing Department office for the most current information.

ADMISSION REQUIREMENTS		Credits
BIO 201	Anatomy and Physiology I	4
BIO 202	Anatomy and Physiology II.	4
BIO 204	Microbiology	4
ENG 121	English Composition I.	3
PSY 235	Human Growth and Development	3

All with a GPA of 2.5 or higher.

First Semester

NUR 109	Fundamentals of Nursing	8
NUR 112	Basics Concepts of Pharmacology	2
HPR108 HWE 100	Dietary Nutrition/Human Nutrition	1/3
MAT 103	Math for Clinical Calculations.	3

Second Semester

NUR 106	Medical and Surgical Nursing Concepts	9
NUR 150	Nursing Care of Obstetric and Pediatric Clients	7
BIO 216	Pathophysiology	4

Third Semester

NUR 169	Transition to Practical Nursing.	5
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PRACTICAL NURSING CURRICULUM

Evening and Weekend Schedule

Subject to change without notification. Contact the OJC Nursing Department office for the most current information.

Admission Requirements

Credits

ENG 121	English Composition I	3
BIO 201	Anatomy & Physiology I	4
BIO 202	Anatomy & Physiology II	4
PSY 235	Human Growth & Development	3
BIO 204	Microbiology	4

(All with a GPA of 2.5 or higher)

Summer Semester

MAT 103	Math for Clinical Calculations	3
HPR108 HWE 100	Dietary Nutrition/Human Nutrition	1/3

Fall Semester

NUR 109	Nursing Skills & Concepts	8
Elective:	GTE Humanities or Social Behavior Science	3

Spring Semester

NUR 106	Medical Surgical Nursing I	9
NUR 112	Basics Concepts of Pharmacology	2
NUR 150	Nursing Care of OB & Pediatric Clients	7

Summer Semester

NUR 169	Transition to Practical Nursing	5
BIO 216	Pathophysiology	4

Recommended Courses for traditional or evening and weekend schedules:

The following courses are recommended to compliment the required nursing program courses. Students are encouraged to register for these courses as their schedule will allow:

CHE 101	Intro to Chemistry	5
CIS 118	Intro to PC Applications	3
ENG 122	English Composition II	3
HPR 178	Medical Terminology	2
PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
SOC 101	Introduction to Sociology I	3
COM 115	Public Speaking	3

REAL ESTATE

This is a one semester certificate that will meet the educational requirements of the Colorado Real Estate Commission for Associate and Independent Broker. A certificate of completion is issued to the student who successfully complete REE 201 and REE 202.

REE 201	Real Estate Broker I	6
REE 202	Real Estate Broker II	6

SMALL BUSINESS MANAGEMENT

Small Business Management is a program designed specifically for the business owner/operator. It is intended to introduce new management tools to businesspersons as well as keeping them abreast of the changing environment of business. Instruction is provided at the place of business.

The Small Business Management program offers five certificates:

- Small Business Planning
- Records and Computerization
- Financial Analysis and Planning
- Marketing and Risk Management
- Marketing and E-Commerce

These certificates are designed to assist small business owners to be more effective and efficient in their operation and marketing of their small business. Each certificate requires a one-year course of study. Student may elect to earn one or more of the certificates.

		Fall	Spring
Small Business Planning			
SMB 121	Small Business Planning I	9	
SMB 122	Small Business Planning II		9
Records and Computerization			
SBM 131	Records & Computerization I	9	
SBM 132	Records & Computerization II		9
Financial Analysis and Planning			
SBM 141	Financial Analysis and Planning I	9	
SBM 142	Financial Analysis and Planning II		9
Marketing and Risk Management			
SBM 151	Marketing and Risk Management I	9	
SBM 152	Marketing and Risk Management II		9
Marketing and E-Commerce			
SBM 153	Marketing, Risk Management & E-Commerce I	9	
SBM 154	Marketing, Risk Management & E-Commerce II		9

WATER QUALITY MANAGEMENT TECHNOLOGY

These two one-semester certificates prepare students for entry-level employment career advancement in water and wastewater treatment. The certificates prepare students to competently carry out all certified operator duties specified in the Colorado Department of Public Health and Environment's Regulation No. 100: Water and Wastewater Facility Operators Certification Requirements, Section 100.16.

Successful students are prepared for the operator's certification test at the C and D level. The courses have been approved by the Colorado Water and Wastewater Facility Operators Certification Board to satisfy the minimum experience requirement for eligibility to sit for the class "D" exam.

Water Treatment Certificate

WQM 124	Water Certification Review for Class C and D3
WQM 120	Water Quality Equipment Maintenance4

Wastewater Treatment Certificate

WQM 125	Wastewater Certification Review for Class C and D3
WQM 120	Water Quality Equipment Maintenance4

