

OCtech Program Student Learning Outcomes

Name of Program: Certificate, General Studies (USMC)

Program Student Learning Outcomes:

- Create and comprehend written communications.
- Practice research skills necessary to locate, analyze, and synthesize information.
- Understand contemporary social values and develop an appreciation for cultural diversity.

Name of Program: Certificate, Sustainable Agriculture

Program Student Learning Outcomes:

- Students will demonstrate knowledge on how to increase farm profits through lowering input costs.
- Students will demonstrate methods to improve soil quality.
- Students will demonstrate environmental conservation methods.
- Students will demonstrate proficiency in implementing Integrated Pest Management methods.
- Students will use a variety of skills to evaluate the diversity of an agricultural operation.

Name of Program: Associate Degree, Administrative Office Technology and Related Diploma

Program Student Learning Outcomes:

- Perform basic office/receptionist functions.
- Use computer skills.
- Demonstrate professional attributes (soft skills).
- Develop interpersonal skills.
- Demonstrate pre-employment skills.

OCtech Program Student Learning Outcomes

Name of Program: Associate Degree, Business Administration: Enterprise Management

Program Student Learning Outcomes:

- Develop management skills.
- Demonstrate introductory marketing skills.
- Practice accounting skills.
- Develop personal finance skills.
- Develop computer skills.
- Demonstrate leadership skills.
- Develop professionalism.
- Communicate effectively.
- Develop teamwork skills.
- Demonstrate an understanding of business law concepts.

Name of Program: Associate Degree, Business Administration: Accounting

Program Student Learning Outcomes:

- Demonstrate knowledge of basic accounting processes.
- Prepare a general ledger.
- Reconcile accounts.
- Prepare manual/computerized financial statements.
- Prepare federal and state forms.
- Use cost accounting techniques.
- Analyze financial statements.
- Demonstrate knowledge of accounting tools.
- Use computer skills to demonstrate accounting principles.
- Develop/use business communication skills.
- Demonstrate professionalism.

OCtech Program Student Learning Outcomes

Name of Program: Certificate, Logistics

Program Student Learning Outcomes:

- Demonstrate the ability to supervise a warehouse operation.
- Demonstrate the ability to operate and maintain equipment commonly found in warehousing.
- Demonstrate an understanding of customer order requirements.
- Communicate effectively.

Name of Program: Associate Degree, Early Care and Education and Related Certificates

Program Student Learning Outcomes:

- Candidates prepared in early childhood degree programs are grounded in a child development knowledge base. They use their understanding of young children's characteristics and needs, and of multiple interacting influences on children's development and learning, to create environments that are healthy, respectful, supportive, and challenging for each child.
- Candidates prepared in early childhood degree programs understand that successful early childhood education depends upon partnerships with children's families and communities. They know about, understand, and value the importance and complex characteristics of children's families and communities. They use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.
- Candidates prepared in early childhood degree programs understand that child observation, documentation, and other forms of assessment are central to the practice of all early childhood professionals. They know about and understand the goals, benefits, and uses of assessment. They know about and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence the development of every child.
- Candidates prepared in early childhood degree programs understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children's ages, characteristics, and the settings within which teaching and learning occur. They understand and use positive relationships and supportive interactions as the foundation for their work with young children and families. Candidates know, understand, and use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.

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- Candidates prepared in early childhood degree programs use their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for each and every young child. Candidates understand the importance of developmental domains and academic (or content) disciplines in early childhood curriculum. They know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and can identify resources to deepen their understanding. Candidates use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child.
- Candidates prepared in early childhood degree programs identify and conduct themselves as members of the early childhood profession. They know and use ethical guidelines and other professional standards related to early childhood practice. They are continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources. They are informed advocates for sound educational practices and policies.

Name of Program: Associate Degree, Criminal Justice and Related Certificates

Program Student Learning Outcomes:

- Demonstrate professionalism when performing public relations tasks.
- Use judgment and decision making skills based on available knowledge to analyze and resolve problems that may arise on a daily basis.
- Apply basic theory/skills of police patrol when faced with the day-to-day challenges of the criminal justice profession.
- Demonstrate knowledge of investigative skills by identifying and using the proper techniques to ensure a thorough investigation is completed.
- Demonstrate knowledge of court rules and procedures as they relate to all participants of the courtroom workgroup (judges, lawyers, officers, defendants, victims, etc.).
- Demonstrate knowledge of the rules and procedures associated with correctional facilities and detention centers with an emphasis on the rights of inmates and safety issues (with regard to the public, employees, and inmates).
- Demonstrate knowledge of the rules and procedures associated with juvenile proceedings and the role of all parties involved (child, parents, judges, lawyers, experts, social workers, etc.)
- Demonstrate knowledge of the duties and roles probation and parole officers have within the criminal justice system.
- Demonstrate an understanding of the security officer's role within the criminal justice system versus that of a police officer.

OCtech Program Student Learning Outcomes

- Demonstrate knowledge of victims' rights and the variety of referral systems available to offer support to victims of crime.
- Demonstrate effective oral and written communication skills in conjunction with active listening skills.

Name of Program: Associate Degree, Computer Technology – Network Security and Information Assurance

Program Student Learning Outcomes:

- Demonstrate core IT competency in client computing and support.
- Demonstrate core IT competency in networking and convergence.
- Demonstrate core IT competency in servers, storage and virtualization.
- Function effectively as a member of a team to accomplish common goals.
- Read and interpret technical information, as well as listen effectively to, communicate orally with, and write clearly for a wide range of audiences.
- Engage in continuous learning and research and assess new ideas and information for lifelong learning.
- Exhibit professional, legal, and ethical behavior.

Name of Program: Associate Degree, Computer Technology – Programming and Related Certificates

Program Student Learning Outcomes:

- Demonstrate core database and information management techniques.
- Demonstrate core competency in programming and application development techniques.
- Display the importance of research and continual learning.
- Demonstrate professional, legal and ethical behavior while completing projects.
- Demonstrate effective communication skills.
- Display the importance of research and continual learning.

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Name of Program: Certificate, Computer Network Specialist

Program Student Learning Outcomes:

- Demonstrate core database and information management techniques.
- Demonstrate core competency in programming and application development techniques.
- Demonstrate knowledge of core database administration skills.
- Demonstrate knowledge of network security in different scenarios.

Name of Program: Certificate, Database

Program Student Learning Outcomes:

- Demonstrate knowledge of key database design techniques.
- Demonstrate the capability to handle large data sets.
- Demonstrate knowledge of core database administration skills.
- Demonstrate core competency in performing database queries.

Name of Program: Associate Degree, Electronics Engineering Technology (Engineering Technology Programming)

Program Student Learning Outcomes:

- Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
- Application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation and maintenance of electrical/electronics(s) systems.
- Apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
- Application of physics or chemistry to electrical/electronic circuits in a rigorous mathematical environment at or above the level of algebra and trigonometry.
- Conduct standard tests and measurements, and conduct, analyze, and interpret experiments.
- Function effectively as a member of a technical team.

OCtech Program Student Learning Outcomes

- Identify, analyze, and solve narrowly defined engineering technology problems.
- Apply written, oral, and graphical communication in both technical and non-technical environments; identify and use appropriate technical literature.
- Demonstrate an understanding of the need for and an ability to engage in self-directed continuing professional development.
- Demonstrate an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
- Exhibit a commitment to quality, timeliness, and continuous improvement.

Name of Program: Associate Degree, Electronics Engineering Technology (Electronic Instrumentation) and Related Certificates

Program Student Learning Outcomes:

- Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
- Application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation and maintenance of electrical/electronics(s) systems.
- Apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
- Apply natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.
- Conduct standard tests and measurements, and conduct, analyze, and interpret experiments.
- Function effectively as a member of a technical team.
- Identify, analyze, and solve narrowly defined engineering technology problems.
- Apply written, oral, and graphical communication in both technical and non-technical environments; identify and use appropriate technical literature.

OCtech Program Student Learning Outcomes

Name of Program: Associate Degree, Engineering Design Technology and Related Certificates

Program Student Learning Outcomes:

- Demonstrate an ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
- Perform a beam analysis by calculating structural properties of a 2x4 beam.
- Demonstrate an ability to apply knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited applications of principles, but extensive practical knowledge.
- Apply drafting practice emphasizing mechanical components and systems, as well as fundamentals of descriptive geometry, orthographic projection, sectioning, tolerancing and dimensioning, and basic computer aided drafting and design with technical depth in at least one of these areas.
- Demonstrate an ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments.
- Apply knowledge of physics and engineering materials having an emphasis in applied mechanics, or in-depth application of physics having emphasis in mechanical components and design.
- Demonstrate an ability to function effectively as a member of a technical team.
- Demonstrate an ability to identify, analyze, and solve narrowly defined engineering technology problems.
- Demonstrate an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- Demonstrate an understanding of the need for and an ability to engage in self-directed continuing professional development. Maintain a drawing portfolio and resume.
- Demonstrate an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
- Demonstrate a commitment to quality, timeliness, and continuous improvement.

Name of Program: Associate Degree, Automotive Technology and Related Certificates

Program Student Learning Outcomes:

- Diagnose and repair engine problems using industry standard equipment.
- Evaluate automatic transmission condition.
- Perform manual drivetrain diagnosis and repair.

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- Diagnose and repair suspension and steering problems and take appropriate action.
- Diagnose and repair brake systems.
- Diagnose and repair electrical/electronic systems.
- Diagnose and repair heating and air conditioning systems.
- Diagnose and repair engine performance systems.
- Follow governmental and employer rules and regulations.
- Develop and use positive working relationships.
- Follow written instructions.

Name of Program: Certificate, Basic Diesel Maintenance

Program Student Learning Outcomes:

- Maintain diesel engines (NATEF Accreditation General Category I).
- Service diesel engines (NATEF Accreditation General Category I).
- Service drive train systems (NATEF Accreditation General Category II).
- Repair electrical systems (NATEF Accreditation General Category V).
- Follow environmental regulations (NATEF Accreditation Electrical/Electronic Category V)
- Demonstrate professional behavior.

Name of Program: Associate Degree, Industrial Electronics Technology and Related Certificates

Program Student Learning Outcomes:

- Apply circuit analysis for testing of electrical/electronics(s) circuits.
- Create effective control programming.
- Apply the knowledge, techniques, skills, and tools of Industrial Electronics Technology to a narrowly defined activity.
- Participate effectively in the completion of a team project.
- Apply standard industrial safety practices to Industrial Electronics and Industrial Maintenance environments.

OCtech Program Student Learning Outcomes

Name of Program: Associate Degree, Machine Tool Technology and Related Certificates

Program Student Learning Outcomes:

- Use technical math to solve machine shop problems.
- Set-up and operate machine shop equipment.
- Perform tooling procedures.
- Build basic dies, jigs, and fixtures.
- Read and draw blueprints.
- Practice safety.
- Exhibit professionalism.
- Communicate effectively.
- Care for and use precision measuring instruments.
- Use basic welding equipment.
- Perform basic cutter-grinding of metal working tools.
- Perform basic heat-treatment techniques.
- Operate and program numerical machines.

Name of Program: Certificate, Industrial Maintenance: Mechanical and Electrical I

Program Student Learning Outcomes:

- Design, construct, and test digital and alternating current circuits.
- Perform basic programmable logic controller (PLC) programming and interface applications.
- Describe the functions of components in a mechanical system.
- Identify the applications of precision measurements in mechanical systems.

Name of Program: Associate Degree, Mechatronics

Program Student Learning Outcomes:

- Demonstrate an ability to apply a knowledge of techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the mechatronics technology.

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- Demonstrate an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes related to Mechatronics.
- Demonstrate an ability to apply written, oral and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- Demonstrate an ability to conduct standards tests and measurements, and to conduct, analyze, and interpret experiments.

Name of Program: Certificate, Production Operator

Program Student Learning Outcomes:

- Set-up and operate machine shop equipment.
- Perform tooling.
- Read and draw blueprints.
- Practice safety.

Name of Program: Certificate, Truck Driver Training

Program Student Learning Outcomes:

- Gain knowledge to pass the South Carolina written exams required to obtain commercial learners permit.
- Become proficient at skills required to pass the South Carolina commercial driver's license skills test.
- Demonstrate knowledge of vehicle inspection related to the safe operation of a vehicle.
- Demonstrate the proper use and function of a manual transmission in a semi-tractor, including basic semi-tractor and trailer maneuvering.
- Demonstrate accurate trip planning including, obtaining load information and map reading.
- Demonstrate the proper procedure for completing a log book.
- Demonstrate the personal and professional ethics and interpersonal skills that are expected in the workplace.

OCtech Program Student Learning Outcomes

Name of Program: Associate Degree, General Technology, Welding

Program Student Learning Outcomes:

- Students should practice general safety considerations that apply to welding and metal cutting. They should also be able to apply practice to avoid job-related deaths and injuries while establishing and maintaining a safe work environment.
- Students will learn how to strike an arc and make stringer, weave, and overlapping beads and make fillet welds in various positions with SMAW process.
- Students will learn to make groove welds in various positions using SMAW process.
- Students can identify, interpret, and draw welding symbols on specifications, drawings, and welding procedure specifications.
- Students should be able to describe welding detail drawings and their components, including lines, fills, solid round and pipe (or tubing) breaks, revolved sections, object views, dimensioning, notes, and bills of materials.
- Students should be able to apply general safety considerations that apply to welding and metal cutting. They should also be able to describe the steps that must be taken to avoid job-related deaths and injuries while establishing and maintaining a safe work environment.
- Students should be able to strike an arc and make stringer, weave, and overlapping beads and make fillet welds in various positions with SMAW.
- Students will make groove welds with backing in the 1G, 2G, 3G, and 4G positions using E6010 and E7018 electrodes.
- Students will identify, interpret, and draw welding symbols on specifications, drawings, and welding procedure specifications.
- Students should be able to describe welding detail drawings and their components, including lines, fills, solid round and pipe (or tubing) breaks, revolved sections, object views, dimensioning, notes, and bills of materials.
- Students should use power sources and equipment utilized in the GMAW and FCAW processes and be able to set up the equipment with the appropriate shielding gases and filler metals.
- Students will learn how to make fillet and/or V-groove welds on carbon steel plate using GMAW and/or FCAW processes in all positions.
- Effectively create written communications.
- Listen for understanding and express views orally.
- Use a variety of critical thinking skills to evaluate and solve problems.
- Have research skills necessary to locate, analyze, and synthesize information.
- Understand contemporary social values.

OCtech Program Student Learning Outcomes

Name of Program: Certificate, Basic Welding

Program Student Learning Outcomes:

- Students should practice general safety considerations that apply to welding and metal cutting. They should also be able to apply practice to avoid job-related deaths and injuries while establishing and maintaining a safe work environment.
- Students will learn how to strike an arc and make stringer, weave, and overlapping beads and make fillet welds in various positions with SMAW process.
- Students will learn to make groove welds in various positions using SMAW process.

Name of Program: Certificate, Intermediate Welding

Program Student Learning Outcomes:

- Students will identify, interpret, and draw welding symbols on specifications, drawings, and welding procedure specifications.
- Students should be able to describe welding detail drawings and their components, including lines, fills, solid round and pipe (or tubing) breaks, revolved sections, object views, dimensioning, notes, and bills of materials.
- Students should use power sources and equipment utilized in the GMAW and FCAW processes and be able to set up the equipment with the appropriate shielding gases and filler metals.
- Students will learn how to make fillet and/or V-groove welds on carbon steel plate using GMAW and/or FCAW processes in all positions.

Name of Program: Associate Degree, Nursing

Program Student Learning Outcomes:

- Advocate for patients and families in a compassionate manner that promotes health, self-determination and integrity.
- Provide and manage safe, quality, compassionate, patient-centered, and evidenced-based care to diverse individuals and groups of patients.
- Practice as a competent and accountable nurse within the professional, ethical, legal, and regulatory framework of nursing.
- Collaborate effectively with nursing peers and interprofessional team members, fostering open communication and mutual respect to achieve quality care.

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- Collaborate effectively with nursing peers and interprofessional team members, fostering open communication and mutual respect to achieve quality care.
- Communicate effectively with patients and families using open dialogue based on mutual respect.
- Collect and use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.

Name of Program: Associate Degree, Physical Therapist Assistant

Program Student Learning Outcomes:

- Demonstrate competence in using evidence-based and inter-professional collaborative practice in the delivery of physical therapy interventions under the supervision of a physical therapist.
- Demonstrate competence and self-reliance with critical thinking and problem-solving skills when delivering patient care.
- Model the APTAs Value Based Behaviors and Standards of Ethical Conduct for the PTA.

Name of Program: Associate Degree, Radiologic Technology and Related Certificates

Program Student Learning Outcomes:

- The student will possess problem solving and critical thinking abilities needed to function in the changing healthcare environment.
- The student will demonstrate academic and technical competence as an entry level radiographer.
- The student will communicate effectively in the classroom and clinical setting.
- The student will demonstrate professional attitudes, behavior, and ethics in the clinical and classroom environment, as well as participate in professional development activities.

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Name of Program: Certificate, Magnetic Resonance Imaging (MRI)

Program Student Learning Outcomes:

- Demonstrate problem solving and critical thinking abilities needed to function in the changing healthcare environment.
- Demonstrate clinical competence as an entry-level MRI technologist.
- Employ effective communication in a health care environment.

Name of Program: Certificate, Mammography

Program Student Learning Outcomes:

- Demonstrate problem solving and critical thinking abilities needed to function in the changing healthcare environment.
- Demonstrate academic and technical competence as an entry-level Mammographer.
- Communicate effectively in the classroom and clinical setting.

Name of Program: Certificate, Emergency Medical Technician

Program Student Learning Outcomes:

- Provide basic emergency care required at the scene of a traumatic injury or emergency.
- Demonstrate the skills for basic life-saving techniques and other emergency treatment.
- Work as a professional member of the emergency response team to provide quality, comprehensive care.
- Communicate effectively in the classroom and clinical setting.

Name of Program: Certificate, Nursing Assistant

Program Student Learning Outcomes:

- Perform duties safely and effectively within the scope of practice as outlined by the requirements of the Nursing Assistant certification.

OCtech Program Student Learning Outcomes

- Demonstrate academic and technical competence in the role of Certified Nursing Assistant.
- Understand and practice infection control per CDC, OSHA, and facility guidelines.
- Provide safe, competent care for the patient to promote health and wellness.

Name of Program: Certificate, Patient Care Technician

Program Student Learning Outcomes:

- Perform duties safely and effectively within their scope of practice as outlined by the requirement of the Nursing Assistant certification.
- Perform duties safely and effectively within their scope of practice as outlined by the requirements of the Phlebotomy certification.
- Perform duties safely and effectively within their scope of practice as outlined by the requirements of the Electrocardiography certification.
- Understand and practice infection control per CDC, OSHA, and facility guidelines.
- Demonstrate adaptability to a variety of work environments, to include long-term care facilities, hospitals, clinics, and various other organizations.

Name of Program: Diploma, Medical Assisting

Program Student Learning Outcomes:

- Apply legal and ethical concepts within the Medical Assisting scope of practice.
- Display professionalism and communication skills as a healthcare provider.
- Apply best practice administrative, business, and finance techniques with the medical practice.
- Demonstrate competence in the performance of clinical skills for entry-level Medical Assistant.
- Achieve cognitive, psychomotor, and affective domain learning objectives as established by the Medical Assisting Education Review Board (MAERB).
- Pursue professional and nationally-recognized credentialing, post-graduation, by applying to sit for the CMA (AAMA) credential.
- Protect the health of the patient and coworker by carefully following Standard Precautions Guidelines and OSHA mandates.

OCtech Program Student Learning Outcomes

- Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
- Incorporate critical thinking skills to provide quality care of patients.

Name of Program: Diploma, Practical Nursing

Program Student Learning Outcomes:

- Demonstrate professional behaviors of accountability and professionalism according to the legal and ethical standards for a competent licensed practical/vocational nurse.
- Effectively communicate with patients, significant support person(s), and members of the interdisciplinary health care team incorporating interpersonal and therapeutic communication skills.
- Collect holistic assessment data from multiple sources, communicate the data to appropriate health care providers, and evaluate client responses to interventions.
- Collaborate with the registered nurse or other members' of the health care team to organize and incorporate assessment data to plan/revise patient care and actions based on established nursing diagnoses, nursing protocols, and assessment and evaluation data.
- Demonstrate a caring and empathic approach to the safe, therapeutic, and individualized care of each client.
- Implement patient care, at the direction of a registered nurse, licensed physician through performance of nursing interventions or directing aspects of care, as appropriate, to unlicensed assistive personnel (UAP).