

#### **CURRICULUM COMMITTEE MEETING**

Friday, March 28, 2025 2:00 p.m.

City Park Campus, Lac Maurepas, Student Life Center

(Building #23, Second Floor)

#### **AGENDA**

- I. Call to Order
- II. Roll Call
- III. Call for Public Comments (LA R.S. 42:26, 2010, No. 861, sec 23)
- IV. Minutes of meeting of February 7, 2025
- V. Curriculum Operations Report-Rosaria Guastella
- VI. New Business

#### a) School of Business/CULA

**Program Revision: Associate of Applied Science-Culinary Arts:** 

<u>Remove:</u> SLO #7: Perform successfully within and lead a team using supervisory skills that reflect the principles of diversity, equity, and inclusion.

#### b) School of Business/HOST

**Program Revision: Associate of Applied Science-Hospitality Management** 

Delete: Concentration in Restaurant Management

#### c) School of Business

**Program Revision: Certificate of Technical Studies: Business Systems Design** 

**Delete:** Certificate of Technical Studies: Business Systems Design

#### d) School of Business

Program Revision: Certificate of Technical Studies: Banking and Lending Assistant

**Delete**: Certificate of Technical Studies: Banking and Lending Assistant

#### e) School of Business/Business and Management

Final Approval for new Concentration in Marketing and Social Media: Associate of Applied Science: Business and Management

Rationale: The proposal for the Marketing and Social Media concentration in the Business and Management A.A.S. was created to fill a gap in our concentration offerings and to address a need within the business community. This concentration will train students to work in the marketing industry by using foundations of marketing in both the traditional and social media setting. The curriculum places emphasis on practical applicability to ensure that students achieve the knowledge needed to be competitive in the current marketing industry. The required courses make certain that students have a diversified marketing portfolio to show to prospective employers.

#### f) School of Health Sciences/Allied Health/DMSU

**Program Revision: Post Associate Certificate: Diagnostic Medical Sonography** 

Delete: Math 120: Contemporary Math from prerequisite for program

Delete: Math 133: Intensive College Algebra as an option for Math prerequisite

<u>Delete</u>: "or" from Math 130 College Algebra <u>or</u> Math 203: Introductory Statistics from Math prerequisite (Math 203 name changed to Statistics I at September 2024 Curriculum Committee Meeting)

#### g) School of Health Sciences/Allied Health

Final Approval of New Instructional Program: Career and Technical Certificate in Emergency Medical Technician—Advanced.

**Program Description:** This Career and Technical Certificate will prepare the student to function as an Advanced Life Support provider providing care above the training level of the Emergency Medical Technician Basic, but below that of the Paramedic. It will prepare the student to be an entry level AEMT, able to function independently at the AEMT level, providing assessment, recognition and treatment of various medical and trauma related problems. The successful completion of the course prepares the student to take the EMS national registry written examination.

#### **Student Learning Outcomes:**

- Evaluate patients for various types of hypoperfusion (Shock), using gained knowledge to determine the appropriate type and treatment.
- Perform vascular access for a variety of patients using proper technique as noted on the appropriate skills sheet.
- Manage as team leader the appropriate assessment and treatment of a cardiac arrest victim, according to national protocols.
- Evaluate patients for various drug and poisoning emergencies and develop the appropriate treatment plan according to national protocols.
- Combining knowledge and skills competency, evaluate patients for various types of respiratory conditions and develop appropriate treatment plan according to national protocols.

#### h) School of Liberal Arts, Social Sciences, and Education/HSEM

Program Revision: Associate of Arts in Homeland Security and Emergency Management Delete: CMIN 204: Fundamentals of Information Technologies and Systems from Required Courses in Major

Delete: CMIN 244: Introduction to Cyber Security from Required Courses in Major

Add: CITS 111: Information Technologies and Systems to Required Courses in Major

Add: CITS 151: Cyber Security I to Required Courses in Major

#### i) School of Liberal Arts, Social Sciences, and Education/CDYC

Program Revision: Associate of Applied Science: Care and Development of Young Children Change in Suggested Sequence:

<u>Remove</u>: 3 credit hour Approved CDYC elective from Fourth Semester <u>Add</u>: 3 credit hour Approved CDYC elective to Second Semester

#### j) School of Liberal Arts, Social Sciences, and Education/FNAR

Course Revision: FNAR 104: Drawing II

New Level/Number: FNAR 204: Drawing II

<u>New Description</u>: Studio class designed to build upon the creative and technical competencies introduced in Beginning Drawing. Emphasis on imagination, technique, development of a personal drawing style and composition as well as developing an understanding of drawing as a means of visual communication.

<u>Old Description</u>: Intermediate course in representational and subjective drawing using various media and techniques.

#### k) School of Liberal Arts, Social Sciences, and Education/FNAR

Course Revision: FNAR 114: Painting II

New Level/Number: FNAR 205

<u>New Description</u>: Builds on the basic skills introduced in Painting I. Emphasis is placed on technical competencies and advanced mediums as well as developing an understanding of painting as a means of visual communication.

<u>Old Description</u>: Intermediate course in painting with experimentation in various media, techniques, and imagery.

#### 1) School of Liberal Arts, Social Sciences, and Education/FNAR

Course Revision: FNAR 127: Contemporary Art

New Level/Number: FNAR 227

#### m) School of Liberal Arts, Social Sciences, and Education/FNAR

**Course Revision: FNAR 251: Special Problems** 

**New Name: Special Projects** 

New Description: Special Projects in Fine Arts.

Old Description: Problems in fine arts. Concentrated work in area of student's interest.

#### n) School of Liberal Arts, Social Sciences, and Education/MUSC

Change of Course Lecture-Lab-Credit Hours: MUSC 109: Music Theory I

From: 3-2-4 To 3-0-3

#### o) School of Liberal Arts, Social Sciences, and Education/MUSC

Change of Course Lecture-Lab-Credit Hours: MUSC 110: Music Theory II

From: 3-2-4 To 3-0-3

#### p) School of Construction Arts and Technical Studies/HACR

Change of Course Pre-requisite: HACR 117: Principles of Refrigeration

<u>Remove</u>: HACR 116: Tubing Fabrication and Fitting <u>Add</u>: HACR 115: Building Code and Licensing

#### q) School of Construction Arts and Technical Studies/ELEC

New course: ELEC 125: Navigating the NEC 2/3/3

**Course Goal:** To provide the student with an understanding of the National Code origins, purpose, and how to use it.

**Course Description:** A comprehensive study of the National Electric Code (NEC) with an emphasis on applying code concepts to residential, commercial, and industrial wiring. Topics include wiring design, protection, methods, materials, equipment, troubleshooting, schematics, and basic calculations. The course also covers the NEC's structure, terminology, and table usage to enhance efficiency and understanding in electrical design and installation.

#### r) School of Construction Arts and Technical Studies/TECH

New course: TECH 110: Industrial Safety 3/0/3

**Course Goal:** The goal of this course is to equip students with the knowledge and skills to identify and mitigate workplace hazards, ensure compliance with industry safety standards, and foster a culture of safety in industrial environments.

**Course Description:** An overview of safety, health, and environmental principles in industrial settings, focusing on hazard recognition, regulatory compliance, and the use of protective measures to ensure workplace safety. Students will develop practical skills to implement safety protocols and respond to emergencies effectively.

#### s) School of Construction Arts and Technical Studies/TECH

New course: TECH 205: Technical Writing and Presentation for Industry 3/0/3

**Course Goal:** To equip students with the technical communication and presentation skills necessary to convey complex information effectively and professionally in industrial and technical environments.

**Course Description:** Introduces students to the principles and practices of technical writing and effective presentation techniques tailored for industrial and technical fields. Students will learn to craft clear, concise, and professional documents, conduct technical research, and deliver impactful presentations aligned with industrial workplace expectations.

#### t) School of Construction Arts and Technical Studies/TECH

New course: TECH 210: Industrial Materials & Manufacturing Processes 2/4/3

**Course Goal:** To equip students with foundational knowledge of materials science and its application in manufacturing, enabling them to analyze and select appropriate materials and processes for industrial applications.

**Course Description:** Introduces the principles of materials science, exploring the relationships between material structure, properties, and processes, with a focus on their applications in industrial manufacturing. Students will examine various materials and their behavior, including

metals, polymers, ceramics, composites, and emerging materials, to understand their role in engineering and manufacturing systems.

#### u) School of Construction Arts and Technical Studies/TECH

New course: TECH 211: Foundations of Industrial Operations 2/4/3

**Course Goal**: To equip students with a strong foundation in industrial operations, safety, and logistics while preparing them for the industry-based certifications that support workforce readiness.

**Course Description:** Introduces students to essential concepts in industrial operations, including workforce safety, quality control, manufacturing processes, and supply chain logistics. Students will develop foundational knowledge of material handling, inventory management, and industrial best practices. The course also provides advanced learning opportunities in logistics and production systems, preparing students for industry-recognized certifications in the field.

#### v) School of Construction Arts and Technical Studies/TECH

New course: TECH 213: Precision Measurement & Industrial Metrology 2/4/3

**Course Goal:** To equip students with the knowledge and skills necessary to utilize precision measurement tools and techniques effectively in industrial settings, ensuring the accuracy and reliability of manufactured components.

**Course Description:** Introduces students to the principles and practices of industrial metrology and precision measurement. Topics include measurement systems, tolerances, statistical methods, and the use of basic and advanced metrology instruments. Students will develop the skills to perform accurate measurements, ensure traceability, and apply precision measurement techniques in industrial contexts.

#### w) School of Construction Arts and Technical Studies/TECH

New course: TECH 214: Applied Human Relations for Industry 3/0/3

**Course Goal**: The goal of this course is to equip students with applied human relations skills that promote effective communication, teamwork, and problem-solving in industrial and technical settings, enabling them to navigate workplace challenges, foster professional growth, and contribute to a positive organizational culture.

**Course Description:** A practical exploration of human relations concepts tailored for industrial and technical environments. Students will develop essential interpersonal skills to enhance workplace relationships and career success. Emphasis is placed on applying strategies for effective professional conduct, improving emotional intelligence, and fostering a positive, collaborative work culture.

#### x) School of Construction Arts and Technical Studies/TECH

New course: TECH 216: Quality Improvement for Industrial Systems 2/4/3

**Course Goal:** To prepare students to implement quality improvement strategies and tools, fostering operational efficiency, enhanced productivity, and sustainable performance in industrial systems.

**Course Description:** Explores the principles and practices of quality improvement in industrial systems, emphasizing tools, techniques, and methodologies for process optimization and performance excellence. Topics include Six Sigma, statistical process control, motion and time studies, and workforce engagement strategies, with practical applications in manufacturing and service environments.

#### y) School of Construction Arts and Technical Studies/TECH

New course: TECH 232: Project Management & Supervision for Industry 2/4/3

Course Goal: The goal of this course is to equip students with the knowledge and skills required to effectively manage and supervise industrial and construction projects, aligning with industry-based certification standards and fostering professional excellence in the field.

Course Description: Introduces students to the fundamental principles of project management and supervision for industry and construction. Students will explore project planning, cost estimation, scheduling, and resource control while developing leadership, communication, and problem-solving skills. The curriculum emphasizes integrating safety practices, quality control, and continuous improvement strategies to prepare students for industry-based certification.

#### z) School of Construction Arts and Technical Studies/TECH

New course: TECH 255: Reality Capture Systems & Applications 2/4/3

**Course Goal:** To equip students with the knowledge and skills required to perform reality capture scans, process the resulting data, and prepare industry-ready data files. **Course Description:** Provides students with a solid understanding of reality capture techniques and technologies used in the creation of virtual environments. Students will learn about the hardware and software commonly used in the industry, the process of reality capture, and the processing of the raw data into environment-building-ready file packages.

#### aa) School of Construction Arts and Technical Studies/TECH

New course: TECH 256: Virtual Environments for Industry 2/4/3

**Course Goal:** To equip students with the knowledge and skills required to take point-cloud raw data and transform it into fully rendered virtual environments with interactive elements.

**Course Description:** Provides students with the foundational theories involved in transforming point cloud data into rendered scenes, then creating interactive virtual environments with that data. Students will learn about the hardware and software commonly used in the industry, processing the raw data into environment-building ready file packages, rendering those packages into virtual environments, then adding interactive elements.

#### bb) School of Construction Arts and Technical Studies/TECH

New Course: TECH 270: Rapid Prototyping Using Additive Manufacturing 2/4/3

**Course Goal:** To provide students with a comprehensive understanding of rapid prototyping and additive manufacturing principles, enabling them to design, develop, and evaluate

prototypes for industrial applications.

**Course Description**: Explores the principles and applications of rapid prototyping and additive manufacturing in product design. Students will gain hands-on experience with virtual prototyping tools, additive manufacturing techniques, and the product design process, culminating in a capstone project where they create, test, and present a functional prototype.

#### cc) School of Construction Arts and Technical Studies/TECH

New Course: TECH 290: Fundamentals of Mechatronics 2/4/3

**Course Goal:** To equip students with foundational knowledge and practical skills to design, test, and troubleshoot mechatronic systems.

**Course Description**: Explores the fundamentals of mechatronic systems through the integration of mechanical, electrical, and software components. Using the Mechatronics Trainer, students will analyze and design systems incorporating sensors, actuators, controllers, and feedback mechanisms. Practical applications emphasize problem-solving and real-world system implementation.

#### dd) School of Construction Arts and Technical Studies/TECH

New Course: TECH 295: Industrial Robotics 2/4/3

**Course Goal:** To prepare students with the knowledge and practical skills to safely program, operate, and troubleshoot industrial robots while understanding their integration into modern manufacturing systems.

**Course Description**: Introduces the fundamentals of industrial robotics, focusing on safety, programming, integration, and operation. Students will gain practical experience with robotic systems, sensors, vision systems, and automation while exploring the principles of design and implementation in industrial applications. The course culminates in a group project to design, build, and test a robotic system.

#### ee) School of Construction Arts and Technical Studies/ELEC

Change of Course Lecture-Lab-Credit Hours: ELEC 131: Residential Wiring & Installation

<u>From</u>: 2-8-5 <u>To</u> 2-3-3

Change of Prerequisites: ELEC 131: Residential Wiring & Installation

Remove: ELEC 102, 103, 123 Add: ELEC 101, ELEC 125

#### ff) School of Construction Arts and Technical Studies/ELEC

Change of Course Lecture-Lab-Credit Hours: ELEC 133: Motors, Transformers, and Generators

From: 2-4-3 To 2-3-3

Change of Prerequisites: ELEC 133: Motors, Transformers, and Generators

Remove: ELEC 102, 103, 124 Add: ELEC 101, ELEC 125 Change of Course Fee: ELEC 133: Motors, Transformers, and Generators

From: \$50 To \$75

#### gg) School of Construction Arts and Technical Studies/ELEC

Change of Course Lecture-Lab-Credit Hours: ELEC 141: Commercial Wiring

From: 2-8-4 To 2-3-3

Change of Prerequisites: ELEC 141: Commercial Wiring

Remove: ELEC 102, 124 Add: ELEC 101, ELEC 125

#### hh) School of Construction Arts and Technical Studies/ELEC

**Change of Course Lecture-Lab-Credit Hours: ELEC 144: Motor Controls** 

From: 1-6-2 To 2-2-2

**Change of Prerequisites: ELEC 144: Motor Controls** 

Remove: ELEC 102, 103, 124

#### ii) School of Construction Arts and Technical Studies/ELEC

Change of Course Lecture-Lab-Credit Hours: ELEC 208: Digital Logic Functions

From: 1-6-4 To 2-3-3

**Change of Prerequisites: ELEC 208: Digital Logic Functions** 

Add: TECH 101, ELEC 112

**Change of Course Fee: ELEC 208: Digital Logic Functions** 

<u>From</u>: \$50 <u>To</u> \$75

#### ij) School of Construction Arts and Technical Studies/ELEC

Change of Prerequisite: ELEC 210: Journeyman Electrical Exam Preparation

Remove (all): ELEC 102, ELEC 103, ELEC 112, ELEC 120, ELEC 123, ELEC 124, ELEC 131, ELEC 133, ELEC 141, and TECH 101 (completion of the Residential CTS program) or 3 years documented experience as a trade electrician.

Change of Corequisite: ELEC: 210: Journeyman Electrical Exam Preparation

Remove: ELEC 120, ELEC 141 Add: ELEC 131, ELEC 144

Change of Course Fee: ELEC 210: Journeyman Electrical Exam Preparation

From \$0 to \$75

#### kk) School of Construction Arts and Technical Studies/ELEC

Change of Course Lecture-Lab-Credit Hours: ELEC 252: Solid State Theory

From: 1-3-2 To 2-3-3

Change of Prerequisites: ELEC 252: Solid State Theory

Remove: ELEC 102, 103, 124, TECH 104

Add: TECH 101

Change of Course Fee: ELEC 252: Solid State Theory

<u>From</u>: \$50 <u>To</u> \$75

#### II) School of Construction Arts and Technical Studies/ELEC

**Concept Proposal of New Instructional Program**: Certificate of Technical Studies in Electrical Technology for Construction.

**Program Description:** The Certificate of Technical Studies in Electrical Technology for Construction is designed to prepare individuals for careers in residential and commercial electrical work within the construction industry. This program covers essential skills and knowledge, including reading electrical schematics, understanding the National Electric Code, and installing and troubleshooting wiring, motors, and transformers. Students gain hands-on experience in residential and commercial wiring systems, as well as thorough preparation for the journeyman electrician exam. Graduates will be equipped to enter the workforce with the technical expertise required to excel in a range of electrical construction roles.

#### **Student Learning Outcomes:**

- Apply safe working practices as defined by OSHA and the National Electric Code (NEC) in electrical construction environments.
- Read, interpret, and analyze electrical blueprints, schematics, and construction documents to plan installations.
- Install and troubleshoot residential and commercial electrical wiring systems in compliance with industry standards.
- Demonstrate knowledge of motors, transformers, and power distribution systems used in electrical construction.
- Apply NEC regulations and electrical calculations to size conductors, raceways, and protective devices for construction projects.
- Prepare for the Journeyman Electrician Exam by applying industry knowledge in troubleshooting and problem-solving scenarios.

#### mm) School of Construction Arts and Technical Studies/DSEL

Final Approval of Concept Proposal for Career and Technical Certificate in Diesel A/C Technician, Certificate of Technical Studies in Diesel Engine Technician, and Technical Diploma in Diesel Equipment Technician

**Program Description**: The mission of the Diesel Technology Program is to provide specialized classroom instruction and practical shop experience to prepare individuals for employment as an entry-level diesel technician. Our goal is to provide current industry knowledge and prepare individuals to engage in the servicing and maintenance of all types of medium/heavy trucks at the entry level. The program prepares the individual to select, safely use, and maintain hand and power tools, jacks, and hoisting equipment. Instruction in the diagnosis of malfunctions and the repair of engines; fuel, electrical, cooling, and brake systems, drive train, suspension systems and maintenance are included.

#### **Student Learning Outcomes:**

- Contribute to a safe work environment through the application of appropriate operational and safety practices.
- Perform worksite duties competently and safely.
- Repair engine-related problems leveraging engine systems knowledge.
- Demonstrate professionalism while in shop and externship.
- Troubleshoot wiring, charging, and starting problems through interpretation of schematics/data and application of common industry tools.
- Service mobile air-conditioning systems.
- Troubleshoot chassis, brakes, and suspension problems by evaluating computerized systems and interpreting fault codes.

#### New Course: DSEL 101: Introduction to Diesel Technology 3/0/3

**Course Goal:** Focus on career opportunities and requirements as a Service Technician in the diesel industry. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Introduction to careers in the diesel service industry, basic safety information, the design and construction of diesel engines and identification of diesel engine parts, tools, test equipment, fasteners, bearings, and seals. Laboratory work requires using tools and fasteners.

#### New Course: DSEL 116: Basic Hydraulics 2/1/3

**Course Goal:** Basic hydraulics overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant vehicle concerns; this is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** This course includes the principles of basic hydraulic systems and general maintenance procedures of a hydraulic system. Also included are the disassembly and assembly of hydraulic components and the application of safety rules and regulations.

#### New Course: DSEL 120: Diesel Preventative Maintenance Service 2/1/3

**Course Goal**: Basic maintenance overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant vehicle concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Includes the importance of preventive maintenance, types of preventive maintenance, types of preventive maintenance inspection, vehicle overview, and the knowledge and use of specialty tools.

#### New Course: DSEL 130: Fundamentals of Diesel Electrical Systems 2/1/3

**Course Goal:** Establish electrical principles required to understand the operation of all modern vehicle electrical systems. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this is vital to the success of a Diesel Technician. Create a sense of academic purpose while encouraging self-responsibility, self-

awareness and student engagement.

**Course Description:** An introductory class in electrical fundamentals. Topics covered in this course will include electrical safety practices, tool use, connecting and disconnecting techniques, direct current symbols, components, and schematics; principles of DC voltage and current, Ohm's Law, and troubleshoot repair and calibrate electrical/electronic systems.

#### New Course: DSEL 138 General Engine Diagnostics 2/1/3

**Course Goal:** Focus on diagnosis of diesel engines. Provide students with modern diagnostic skills and repair procedures to satisfy relevant vehicle concerns; this is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Includes performance of preventive maintenance on diesel engines, diagnosis of engine malfunctions, performance of tune-ups using related service manuals and test equipment.

New Course: DSEL 140: Diesel Engines 3/2/5

**Course Goal:** Prepare students for base engine concerns. Assist student in understanding 1) Basic operating principles of diesel engines. 2) Modern cylinder head and short block diagnosis and repair procedures. 3) Proper disassembly and re-assembly procedures. 4) Engine removal and installation procedures. Provide students with modern diagnostic skills and repair procedures to satisfy relevant vehicle concerns; this is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Engine disassembly and basic parts operation and service for rebuilding of medium and heavy-duty diesel engines. Students gain knowledge in operation, troubleshooting, rebuilding and tuning all types of diesel engines. Work includes disassembly, assembly, injection timing and adjustment common to diesel engines used in the transportation and industrial industries.

New Course: DSEL 144: Transmissions 2/1/3

**Course Goal:** Transmission systems overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant vehicle concerns; this is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Covers clutches, manual transmission and automatic transmissions Students learn basic diagnostic tests, perform these tests and interpret the results on clutch components. synchronizer assemblies and shifter mechanisms; gear and bearing noises

New Course: DSEL 146: Differentials 2/1/3

**Course Goal:** Prepare students for manual drivetrain and axle concerns Assist the student in understanding drive axle shaft concerns and differential gear pattern diagnosis. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student

engagement.

**Course Description:** Includes identifying the parts of drive lines and differentials for medium/heavy duty trucks and heavy equipment.

New Course: DSEL 154: Brakes 2/1/3

**Course Goal:** Basic brake systems overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Includes nomenclature, theory of operation, and service procedure for medium/heavy duty truck braking systems to include air and hydraulics.

New Course: DSEL 160: Air Conditioning 2/1/3

Course Goal: Provide the knowledge and skills to diagnose, repair and service climate control systems. Achieve and obtain Refrigerant Recovery and Recycling Certification. Assist students in understanding: 1) Component function and operation. 2) Air flow management. 3) Refrigerant system operation. 4) Electrical/ electronic controls 5) Diagnosis and testing procedures. 6) Service and repair procedures. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement. Course Description: Covers the physical and chemical laws governing the principles of refrigeration. The basic cycle and components will be covered. Applications will include alternate refrigerants, recovery, evacuation and refrigerant recycling.

#### New Course: DSEL 188: Work Experience Externship 0/3/3

**Course Goal:** Work experience in the Diesel Industry. Requires the following forms: Student Work Information, Student Work Journal, Student Work Evaluation. It is the student's responsibility to contact the Work Experience course instructor *during* the first week and *during* the last week of the semester. The student *must* obtain and return these forms at the appropriate times (What's expected of the student?) during the semester; or a final grade of (F) will be given to the student for that Cooperative Education class. This course provides the student an opportunity to develop their skills sets under a mentor. **Course Description**: Provides students with the opportunity to exercise as well as to apply the skills mastered while participating in live work.

#### New Course: 206: Diesel Engine Fuel and Control Systems 2/1/3

**Course Goal:** Explore diesel fuel system design, operation, diagnosis and service. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** Includes identification, operation, and servicing of vehicle computer control and fuel systems.

#### New Course: DSEL 217: Fundamentals of Steering 2/1/3

Course Goal: Covers basic Steering Systems overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement. Course Description: The theory of operation and service procedures for medium/heavy

duty truck steering systems.

#### New Course: DSEL 219: Fundamentals of Suspension 2/1/3

Course Goal: Covers basic Suspension Systems overview. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

Course Description: The theory of operation and service procedures for medium/heavy duty truck suspension systems.

#### New Course: DSEL 231: Advanced Diesel Electrical Systems 2/2/4

**Course Goal:** Create a solid foundation in electrical systems & their electronic control. Provide students with modern diagnostic skills and repair procedures to satisfy relevant customer concerns; this Is vital to the success of a Diesel Technician. Create a sense of academic purpose, while encouraging self-responsibility, self-awareness and student engagement.

**Course Description:** The study of DC resistance and conductors, principles of DC circuits, fundamentals of alternating current and semiconductors, basic electronic circuits, and digital electronics.

#### nn) School of Science, Technology, Engineering, and Mathematics/CNCY

Change of Course Pre-requisite: CNCY: 131: IT Hardware Support

Remove: CNCY 111 and CNCY 121

Add: CITS 101

#### oo) School of Science, Technology, Engineering, and Mathematics/CNCY

Change of Course Pre-requisite: CNCY 132: IT Software Support

Remove: CNCY 111 and CNCY 121

Add: CITS 101

#### pp) School of Science, Technology, Engineering, and Mathematics/CNCY

Change of Course Pre-requisite: CNCY 151: Cyber Security I

Remove: CNCY 111

## qq) School of Science, Technology, Engineering, and Mathematics/CITS

New Course: CITS 224: Back-End Web Development II 3/0/3

Course Goal: This course teaches students how to build back-end APIs from scratch using a modern back-end development stack. At the end of the course, students will be able to define and implement strategic decisions for the success of versatile web platforms. This course is a continuation of CITS 223, expanding upon server-side programming by building application programming interfaces (APIs).

**Course Description:** Development of server-side application programming interfaces (APIs). This course reinforces concepts introduced in CITS 223 and details advanced concepts and recent frameworks for server-side programming as well as several best practices for improving the design, implementation, and scalability of web applications.

# rr) School of Science, Technology, Engineering, and Mathematics/CITS New Course: CITS 261: Game Development for Virtual Reality 3/0/3

**Course Goal**: This course prepares students for the Unity Certified User: VR Developer certification. In this course, students develop applications for VR platforms, optimize applications for performance, and add to their portfolio of completed game development projects.

**Course Description**: Development of virtual reality (VR) applications. Students develop virtual reality applications and simulations featuring common user interactions and prepare to sit for an industry-based certification.

#### ss) School of Science, Technology, Engineering, and Mathematics/CITS

Change of Course Name: CITS 223: Back-End Web Development

From: Back-End Web Development To: Back-End Web Development I

**Change of Course Pre-requisite: CITS 223** 

Remove: CITS 122 Add: CITS 121

**Change of Student Learning Outcomes: CITS 223** 

Remove: Evaluate, modify, and utilize graphics and multi-media in website

Remove: Use advanced multi-media tools in website creation

# tt) <u>School of Science, Technology, Engineering, and Mathematics/PHYS</u> Change of Course Description: PHYS 101: Introduction to Concepts in Physics

New Description: A lecture course for students not majoring in science or engineering technology. Topics include scientific method, metric measurement, motion in one and two directions, graphical analysis, vectors, work, power, and energy. Students without high school physics may use this course to prepare for the more rigorous PHYS 141. [LCCN: CPHY 1013] Old Description: Survey of Concepts in Physics; for non-science majors. Students without high school physics may use this course to prepare for PHYS 141. [LCCN: CPHY 1013]

# uu) School of Science, Technology, Engineering, and Mathematics/PHYS Change of Course Pre-requisite: PHYS 107: Introduction to Concepts in Physics Laboratory "C" or higher in PHYS 101 or Concurrent Enrollment in PHYS 101

#### Change of Course Description: PHYS 107: Introduction to Concepts in Physics Laboratory

<u>New Description:</u> A laboratory course for students not majoring in science or engineering technology. Topics include scientific method, metric measurement, motion in one and two directions, graphical analysis, vectors, work, power, and energy.

<u>Old Description</u>: Laboratory to accompany PHYS 101. Exercises in motion, force, work, and energy.

# vv) School of Science, Technology, Engineering, and Mathematics/PHYS

Change of Course Description: PHYS 221: Physics I (Calculus Based)

<u>New Description</u>: A calculus-based lecture course in Physics. The first of a three-course sequence in classical physics for students who intend to major in physical sciences or engineering. Topics include vectors and Newtonian mechanics (kinematics, Newton's laws, momentum, work and energy, rotational kinematics, oscillations, elasticity and equilibrium. The course emphasizes understanding basic principles and problem-solving. The accompanying laboratory for this course is PHYS 223. [LCCN: CPHY 2133]

<u>Old Description:</u> Calculus-based physics: vectors, kinematics, Newton's Laws, momentum, work & energy, rotations, oscillations, elasticity & equilibrium. (Intended for engineering and physical science majors.) [LCCN: CPHY 2133]

#### ww) School of Science, Technology, Engineering, and Mathematics/PHYS

Change of Course Pre-requisite: PHYS 229: Physics III (Calculus Based)

Remove: Math 221 and PHYS 223

#### xx) School of Science, Technology, Engineering, and Mathematics/CITS

**Program Revision: Certificate of Technical Studies: Web Site Design** 

Change name: from Web Site Design to Web Development

<u>Change program description:</u> Delete sentence "Additionally, prospective students should be familiar with the World Wide Web. Students lacking the necessary skills should first take Computer & Internet Literacy (CMIN 201). This class will not count toward the required 24 credit hours."

<u>Delete:</u> ADOT 161, BUSG 128, ADOT 215, ADOT 135, ADOT 131, CMIN 203, CMIN 216,

CMIN 220, CMIN 255, ADOT 209

Delete: "Select from" category

Add: CITS 101: Computer & Internet Literacy

Add: CITS 224: Back End Development II

Add: CITS 127: Photo Editing Software

Add: CITS 131: Python Programming Logic I

Add: CITS 121: Front-End Web Development I

Add: CITS 122: Front-End Web Development II

Add: CITS 223: Back-End Web Development I

Add: CITS 225: User Experience and Prototyping

#### yy) School of Science, Technology, Engineering, and Mathematics/CITS

#### Program Revision: Associate of Applied Science in Computer Information Technology

Delete: CMIN 203, CMIN 204, CMIN 216, CMIN 244, CMIN 250, CMIN 275, CMST 131, CNET 157

from Courses Required in Major

Add: CITS 101: Computer & Internet Literacy to Courses Required in Major

Add: CITS 131: Python Programming Logic I to Courses Required in Major

Add: CITS 111: Information Technologies and Systems to Courses Required in Major

Add: CITS 121: Front-End Web Development I to Courses Required in Major

Add: CNCY 151: Cyber Security I to Courses Required in Major

Add: CITS 231: Java Programming I to Courses Required in Major

Add: CITS 141: Introduction to C++ to Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

Delete: MATH 120, MATH 128, MATH 133 from General Education Requirement

Delete: Humanities Requirement (any course)

Add: CMST 131: Fundamentals of Communication to Humanities Requirement

#### Area of Concentration: Game Developer

Delete: CMIN 207, CMIN 214, CMIN 217, CMIN 218

<u>Delete</u>: Select From Category (3 courses) <u>Add</u>: CITS 132: Python Programming Logic II

Add: CITS 161: Introduction to Game Design and Development

Add: CITS 162: Game Structure and Development

Add: CITS 167: Modeling and Texturing for 3D Animation and Games

Add: 225: User Experience and Prototyping

Add: Java Programming II

Add: CITS 261: Game Development for Virtual Reality

#### Area of Concentration: Information Security/Assurance

Delete: BUSL 210, CMIN 246, CMIN 248, CNET 117, CNET 197

<u>Delete:</u> Select From Category (2 courses)

<u>Add:</u> CITS 116: Cloud Computing Foundations

Add: CNCY 111: Survey of Operating Systems

Add: CNCY 141: Windows Server Add: CNCY 153: Cyber Security II Add: CNCY 241: Networking II

Add: CNCY 221: Linux Systems Administration

Add: CNCY 253: Computer Forensics and Cyber Crime

#### Area of Concentration: Programmer/Analyst Specialist

Delete: CMIN 207, CMIN 211. CMIN 257, CMIN 291

<u>Delete:</u> Select From Category (3 courses)

Add: CITS 116: Cloud Computing Foundations

Add: CITS 132: Python Programming Logic II

Add: CITS 136: Visual Basic Programming

Add: CITS 173: Database Management Systems

Add: CITS 232: Java Programming II

Add: CITS 235: Discrete Structures

Add: CITS 238: Systems Analysis and Design

#### **Area of Concentration: Web Design Specialist**

Change name to Web Development

<u>Delete:</u> ADOT 131, ADOT 215, CMIN 220, CMIN 255

**Delete:** Select From Category (3 courses)

Add: CITS 122: Front-End Web Development II

Add: CITS 127: Photo Editing Software

Add: CITS 132: Python Programming Logic II

Add: CITS 223: Back-End Web Development I

Add: CITS 232: Java Programming II

Add: CITS 224: Back-End Development II

Add: CITS 225: User Experience and Prototyping

#### zz) School of Science, Technology, Engineering, and Mathematics/CNCY

**Program Revision: Career and Technical Certificate: Net+ Certification** 

Change program name from: Net+ Certification to Computer Network Support

<u>Change program description to:</u> The Computer Network Support C.T.C. program aims to prepare students with the skills to work as a network support technician and successfully complete IC3 certifications and the CISCO Certified Support Technician certification exam. The program focuses on the understanding of network hardware, installation, and troubleshooting.

Delete: CNET 157 and CNET 297 from Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

Add: CITS 100: Intro to Computer Applications OR CITS 101: Computer and Internet Literacy to Courses Required in Major.

#### aaa) School of Science, Technology, Engineering, and Mathematics/CNCY

## Program Revision: Career and Technical Certificate: Information Technology Support

Delete: ADOT 231, ADOT 232, CMIN 204, CNET 157 from Courses Required in Major

Add: CITS 101: Computer and Internet Literacy to Courses Required in Major

Add: CNCY 132 IT Software Support to Courses Required in Major

Add: CNCY 131: IT Hardware Support to Courses Required in Major

Add: CNCY 121 Networking I to Courses Required in Major

#### bbb) School of Science, Technology, Engineering, and Mathematics/CNCY

Program Revision: Certificate of Technical Studies: Computer Network Technician

<u>Delete:</u> CNET 117, CNET 157, CNET 178, CNET 180, CNET 197, CNET 277 from Courses Required in Major

Add: CNCY 111: Survey of Operating Systems to Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

Add: CNCY 141: Windows Server to Courses Required in Major

Add: CNCY 211: Virtual Computer Systems to Course Required in Major

Add: CNCY 221: Linux Systems Administration to Courses Required in Major

Add: CNCY 241: Networking II to Courses Required in Major

Add: CITS 100: Introduction to Computer Applications to Courses Required in Major

Delete: Required Related Category (TECH 104)

### ccc) School of Science, Technology, Engineering, and Mathematics/CITS

**Program Revision: Career and Technical Certificate: Application Programming** 

<u>Delete:</u> CNET 157, CMIN 203, CMIN 204, CMIN 214 or CMIN 250 from Courses Required in Major

Add: CITS 111: Information Technologies and Systems to Courses Required in Major

Add: CITS 131: Python Programming Logic I to Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

Add: CITS 141: Introduction to C++ OR CITS 231 Java Programming I to Courses Required in Major

#### ddd) School of Science, Technology, Engineering, and Mathematics/CITS

#### **Program Revision: Career and Technical Certificate: Web Programming**

Delete: ADOT 215, CMIN 203, CMIN 216, CMIN 220 from Courses Required in Major

Add: CITS 131: Python Programming Logic I to Courses Required in Major

Add: CITS 121: Front-End Web Development I to Courses Required in Major

CITS 122: Front-End Web Development II to Courses Required in Major

CITS 223: Back-End Web Development to Courses Required in Major

#### eee) School of Science, Technology, Engineering, and Mathematics/CITS

#### **Program Revision: Career and Technical Certificate: Cloud Computing**

Delete: CMIN 204, CMIN 233, CMIN 244, CNET 157 from Courses Required in Major

Add: CITS 111: Information Technologies and Systems to Courses Required in Major

Add: CITS 116: Cloud Computing Foundations to Courses Required in Major

Add: CNCY 151: Cyber Security I to Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

#### fff) School of Science, Technology, Engineering, and Mathematics/CITS

#### **Program Revision: Associate of Applied Science in Cloud Computing**

<u>Delete</u>: CMIN 203, CMIN 204, CMIN 233, CMIN 244, CMIN 266, CMIN 275, CNET 157, CNET 178,

CNET 197, CNET 294, ELST 262, ELST 267, MANG 201 from Courses Required in Major

Add: CITS 101: Computer & Internet Literacy to Courses Required in Major

Add: CITS 111: Information Technologies and Systems to Courses Required in Major

Add: CITS 116: Cloud Computing Foundations to Courses Required in Major

Add: CITS 121: Front-End Web Development I to Courses Required in Major

Add: CITS 131: Python Programming Logic I to Courses Required in Major

Add: CITS 173: Database Management Systems to Courses Required in Major

Add: CITS 223: Back-End Web Development I to Courses Required in Major

Add: CNCY 121: Networking I to Courses Required in Major

Add: CNCY 131: IT Hardware Support to Courses Required in Major

Add: CNCY 132: IT Software Support to Courses Required in Major

Add: CNCY 141: Windows Server to Courses Required in Major

Add: CNCY 151: Cyber Security I to Courses Required in Major

Add: CNCY 211: Virtual Computer Systems to Courses Required in Major

Add: CNCY 221: Linux Systems Administration to Courses Required in Major

Add: CNCY 261: Cloud Architecture to Courses Required in Major

Delete: MATH 120, MATH 128, MATH 133 from General Education Requirement

<u>Delete:</u> Humanities Requirement (any course)

**Delete:** Approved Electives Category

Add: CMST 131: Fundamentals of Communication to Humanities Requirement

# ggg) School of Science, Technology, Engineering, and Mathematics/ELST Program Revision: Certificate of Technical Studies: Computer and Electronics Service Technology

Delete: ELST 262 from Courses Required in Major

Add: CNCY 131: IT Hardware Support to Courses Required in Major

<u>Delete:</u> CNET 157, TECH 104 from Required Related Courses <u>Add:</u> CNCY 121: Networking I to Required Related Courses

Add: CITS 100: Introduction to Computer Applications to Required Related Courses

**Revise Course Sequence** 

### VII. Consent Agenda

#### a) College Board Advanced Placement Credit

VIII. Next Meeting April 25, 2025

IX. Adjournment