

Agricultural Equipment Technology AAS

Program Goals

- 1 Practice safe work habits
- 2 Apply technique used to troubleshoot and repair agricultural equipment
- 3 Demonstrate problem solving skills
- 4 Communicate effectively using oral and written formats
- 5 Illustrate proper tool usage

Courses & Objectives

AG227 Combines/6

- 1 Identify each major system of a combine
- 2 Demonstrate the operation of each component of a combine
- 3 Diagnose, disassemble, repair, and assemble combine components
- 4 Perform preventive maintenance on combines

AG228 Tractors/6

- 1 Identify each major system of a tractor
- 2 Demonstrate the operation of each component of a tractor
- 3 Diagnose, disassemble, repair, and assemble the tractor components
- 4 Perform preventive maintenance on tractors

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU123 Electrical & Electronics/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter
- 3 Navigate wiring diagrams

- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

DT119 Theory & Techniques in Welding/6

- Weld mild steel and aluminum. Use gas metal arc welding, shielded arc welding, gas tungsten arc welding, and oxygen and acetylene procedures
- 1 Weld mild steel and aluminum with oxygen/acetylene torch and plasma cutters
 - 2 Demonstrate the ability to work within a small group and large group atmosphere as a team
 - 3 Identify the operation and function of the different welding types
 - 4

DT124 Diesel Engine Diagnosis & Repair/6

- 1 Explain the operation of the compression ignition engine
- 2 Research diesel engines service and repair information
- 3 Demonstrate the ability to work within a small group and large group as a team member
- 4 Disassemble and reassemble a diesel engine using manufacturers' supplied service information
- 5 Measure and determine if they meet manufacturers' specifications

DT131 Truck Drivetrains/6

- 1 Diagnose and analyze various suspension and drivetrain-related components and problems
- 2 Define and explain the theory and operation of truck drivetrain components
- 3 Demonstrate the ability to work within a small group and large group atmosphere as a team

DT228 Heavy Equipment & Vehicle Integrated Electronics/6

- 1 Demonstrate proper use of meters, scan tools, and oscilloscopes
- 2 Explain basic principles of electronics and wiring schematics
- 3 Describe electrical systems on heavy equipment and vehicle systems
- 4 Demonstrate safety precautions when working on electronics

DT230 Diesel Performance & Diagnosis/6

- Explain the operation of the compression ignition engine, including the operation of both mechanical and electronic fuel systems as well as the operation of the turbochargers
- 1 Identify the type of fuel system and the method of metering and diagnosing fuel system related performance complaint by using factory specified procedures
 - 2 Research and retrieve information on diesel engines and diesel engine fuel systems
 - 3 Demonstrate the ability to function with a group as a team member
 - 4

DT235 Diesel Engine Electronic Controls/6

- 1 Analyze electronic engine controls
- 2 Apply electrical principles and testing
- 3 Demonstrate fuel system diagnostics
- 4 Demonstrate tune-up procedures on live engines

HY130 Hydraulics/6

- 1 Diagnose, disassemble, repair, and assemble hydraulic systems
Explain the theory and operating principles of pumps, motors, valves, cylinders, accumulators, hydrostatic drives, seals, and types of fluids
- 2
- 3 Use hydraulic symbols to create hydraulic schematic diagrams
- 4 Practice safe work habits specific to hydraulic systems

UN295 Major Specific Capstone - Associate/3

- 1 Program Goals

Automotive Technology Supervision BS

Program Goals

- 1 Examine the history and impact of the automotive industry
- 2 Evaluate supervision of employees in the automotive industry
- 3 Validate customer relations in the automotive industry
- 4 Assess the safety, legal, and environmental issues in the automotive industry
- 5 Adapt marketing principles to the automotive industry
- 6 Compose technical writing in the automotive industry

Courses & Objectives

AM300 Survey of the Automotive Industry/5

- 1 Evaluate past influences of the automotive industry
- 2 Critique the present state of the automotive industry
- 3 Predict anticipated future trends in the automotive industry

AM350 Supervision in the Automotive Industry/5

- 1 Analyze supervisory models
- 2 Analyze trends and challenges in supervision
- 3 Assess traits that are inherent to effective supervision and leadership

- 4 Construct effective communication

AM400 Automotive Customer Relations/5

- 1 Evaluate the value-based equation for customer loyalty
- 2 Validate ROI (return on investment) as it pertains to market share and customer loyalty

AM430 Safety, Legal, and Environmental Issues in the Automotive Industry/5

- 1 Evaluate workplace safety situations and employ practices that comply with regulations in the automotive/service industry
- 2 Assess workplace environmental issues and identify practices that comply with EPA regulations for the automotive/service industry
- 3 Resolve legal issues and ramifications in relation to OSHA standards

AM450 Marketing in the Automotive Industry/5

- 1 Assess the different marketing mix (e.g. price, distribution, product, promotion)
- 2 Select the standard and emerging markets that will affect the automotive industry
- 3 Apply the analytical structure of influencing marketing principles as it relates to the automotive/service industry
- 4 Evaluate how information technology is used in the marketing industry to develop new markets and create new opportunities

AM490 Automotive Technology Supervision Capstone/3

- 1 All Program Goals

Automotive Technology AAS

Program Goals

- 1 Evaluate, diagnose, and repair automatic and standard transmission/transaxle drivetrain malfunctions
- 2 Evaluate, diagnose, and repair electrical components, systems, and related circuitry utilizing wiring diagrams, digital multi-meters and oscilloscopes
- 3 Evaluate, diagnose, and repair tires, steering, suspension, and brake system issues
- 4 Assess the operation of a heating and air conditioning system as well as accurately diagnose and repair the system as per the manufacturer's procedures
- 5 Evaluate the operation of internal combustion engines, ignition and fuel systems, and analyze, diagnose, and repair faults
- 6 to analyze proper operation of the systems then accurately diagnose and repair drivability issues in accordance with customer concerns

- 7 Practice safe work habits while complying with local, state, and federal regulations receiving a repair order with a customer complaint, identifying the cause of the issue, and listing the
- 8 corrections taken; verify the repair corrected the customer's concern and return the repair order

Courses & Objectives

AU116 Manual Drivetrains & Axles/6

- 1 Perform basic operation of manual and transaxle transmission and related components
- 2 Diagnose and repair driveline issues
- 3 Operate and set up final drive
- 4 Perform four-wheel-drive operation, diagnosis, and repair

Automatic Transmissions/Transaxle/6

- 1 Interpret the principles and operation of the automatic transmission
- 2 Relate the operation of the manufacturers' FWD automatic transaxle
- 3 Examine the operation of the manufacturers' RWD automatic transmission
- 4 Diagnose and repair transmission-related problems

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU122 Automotive Engine Diagnosis & Repair/6

- 1 Measure engine components
- 2 Appraise cooling system operation
- 3 Analyze lubrication system operation
- 4 Verify valve train components and operations
- 5 Differentiate short block components and operations

AU123 Electrical & Electronics/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter

- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

AU126 Suspension & Steering/6

- 1 Dismount, mount, and balance tires
- 2 Replace suspension and steering components through proper procedure
- 3 Diagnose vibration complaints
- 4 Perform four-wheel alignments

AU127 Hydraulic Brake Systems/6

- 1 Analyze hydraulic principles and operation of the brake systems
- 2 Explain bearings and systems that affect the braking systems
- 3 Interpret the operation of an on-car and off-brake lathe
- 4 Perform a front and rear brake job
- 5 Explain the ABS system and operation

AU228 Electrical & Electronics II/6

- 1 Apply the principles of electronics as it applies to the automotive and high performance fields
- 2 Diagnose and repair faults in the electronic systems involved in the operation of air bags, passive
- 3 Apply proper safety precautions when dealing with all electrical and electronic equipment

AU230 Automotive Engine Performance/6

- 1 Analyze the fundamentals of internal combustion engines
- 2 Compare the operation of ignition systems
- 3 Differentiate the operation of fuel systems
- 4 Categorize the operation of emission systems
- 5 Diagnose engine, fuel systems, and ignition systems

AU232 Computerized Engine Control Systems/6

- 1 Assemble computerized engine components
- 2 Integrate diagnostics concepts
- 3 Manage OBD II and multiplexing operations
- 4 Perform diagnostics on various manufacturers' computer control systems

UN295 Major Specific Capstone - Associate/3

Program Goals

Construction Equipment Technology AAS

Program Goals

- 1 Troubleshoot and repair construction equipment systems according to AED standards
- 2 Communicate effectively using oral and written formats
- 3 Demonstrate problem solving skills
- 4 Analyze electronic and hydraulic control systems
- 5 Demonstrate proper tool usage
- 6 Employ the use of manufacturers' service manuals both online and paper copies
- 7 Practice safe work habits

Courses & Objectives

AG228 Tractors/6

- 1 Identify each major system of a tractor
- 2 Demonstrate the operation of each component of a tractor
- 3 Diagnose, disassemble, repair, and assemble tractor drive train components
- 4 Perform preventive maintenance on tractors

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU123 Electrical & Electronics/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter
- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

CET100 Construction Equipment Drivetrains/6

- 1 Identify each major drive line system of Construction Equipment
- 2 Describe each part of the components and its operations
Develop communication skills by diagnosis, disassembly, repair, and reassembly, of Construction Equipment drive line components
- 3
- 4 Perform preventative maintenance on Construction Equipment

CET295 Construction Equipment Capstone/4

- 1 All Program Goals

DT124 Diesel Engine Diagnosis & Repair/6

- 1 Explain the operation of the compression ignition engine
- 2 Research diesel engines service and repair information
- 3 Demonstrate the ability to work within a small group and large group as a team member
- 4 Disassemble and reassemble a diesel engine using manufacturers' supplied service information
- 5 Measure and determine if they meet manufacturers' specifications

DT228 Heavy Equipment & Vehicle Integrated Electronics/6

- 1 Demonstrate proper use of meters, scan tools, and oscilloscopes
- 2 Explain basic principles of electronics and wiring schematics
- 3 Describe electrical systems on heavy equipment and vehicle systems
- 4 Demonstrate safety precautions when working on electronics

DT230 Diesel Performance & Diagnosis/6

- 1 Explain the operation of the compression ignition engine, including the operation of both mechanical and electronic fuel systems as well as the operation of the turbochargers
Identify the type of fuel system and the method of metering and diagnosing fuel system related performance complaint by using factory specified procedures
- 2
- 3 Research and retrieve information on diesel engines and diesel engine fuel systems
- 4 Demonstrate the ability to function with a group as a team member

DT235 Diesel Engine Electronic Controls/6

- 1 Analyze electronic engine controls
- 2 Apply electrical principles and testing
- 3 Demonstrate fuel system diagnostics
- 4 Demonstrate tune-up procedures on live engines

HY130 Hydraulics/6

- 1 Diagnose, disassemble, repair, and assemble hydraulic systems

- 1 Explain the theory and operating principles of pumps, motors, valves, cylinders, accumulators, hydrostatic drives, seals, and types of fluids
- 2
- 3 Use hydraulic symbols to create hydraulic schematic diagrams
- 4 Practice safe work habits specific to hydraulic systems

HY231 Construction Equipment Hydraulics/6

- 1 Apply the theory and operating principles of and types of flow-sharing, negative and positive flow control systems stack valves, and multivalve configuration
- 2 Read and diagnose flow of hydraulic symbols, hydraulic schematic diagrams
Diagnosis, disassembly, repair, and reassembly of hydraulic components such as pumps, motors, valves, cylinders, accumulators, and hydrostatic drives
- 3
- 4 Improve and refine his or her employability skills which is broken down into four categories: tardy, prepared, safety, and on task

Diesel Technology - Light Duty AAS

Program Goals

- 1 Troubleshoot and repair light duty truck systems according to NATEF standards
- 2 Communicate effectively using oral and written formats
- 3 Demonstrate problem solving skills
- 4 Analyze electronic control systems
- 5 Illustrate proper tool usage
- 6 Employ the use of manufacturers' service manuals both online and paper copies
- 7 Practice safe work habits

Courses & Objectives

AU116 Manual Drivetrains & Axles/6

- 1 Perform basic operation of manual and transaxle transmission and related components
- 2 Diagnose and repair driveline issues
- 3 Operate and set up final drive
- 4 Perform four-wheel drive operation, diagnosis, and repair

AU117 Automatic Transmissions/Transaxles/6

- 1 Interpret the principles and operation of the automatic transmission
- 2 Analyze the operation of the Chrysler automatic RWD transmission

- 3 Relate the operation of the Ford FWD automatic transaxle
- 4 Examine the operation of the GM RWD automatic transmission
- 5 Diagnose and repair transmission-related problems

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU123 Electrical & Electronics/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter
- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

AU126 Suspension & Steering/6

- 1 Dismount, mount, and balance tires
- 2 Replace suspension and steering components through proper procedure
- 3 Diagnose vibration complaints
- 4 Perform four-wheel alignments

AU127 Hydraulic Brake Systems/6

- 1 Analyze hydraulic principles and operation of the brake systems
- 2 Explain bearings and systems that affect the braking systems
- 3 Interpret the operation of an on-car and off-brake lathe
- 4 Perform a front and rear brake job
- 5 Explain the ABS system and operation

DT119 Theory & Techniques in Welding/6

- Weld mild steel and aluminum. Use gas metal arc welding, shielded arc welding, gas tungsten arc welding, and oxygen and acetylene procedures
- 1
 - 2 Cut mild steel and aluminum with oxygen/acetylene torch and plasma cutters

- 3 Demonstrate ability to work within a small group and large group atmosphere as a team member/team
- 4 Identify the operation and function of the different welding types

DT127 Light Duty Diesel Engine Diagnosis & Repair/6

- 1 Relate the operation of the compression ignition engine.
- 2 Utilize computers to research diesel engines service and repair information.
- 3 Collaborate within a small group and large group as a team member.
- 4 Disassemble and reassemble a diesel engine using manufactures supplied service information.
- 5 Measure and determine if they meet manufacturers' specifications.

DT228 Heavy Equipment & Vehicle Integrated Electronics/6

- 1 Demonstrate proper use of meters, scan tools, and oscilloscopes
- 2 Explain basic principles of electronics and wiring schematics
- 3 Describe electrical systems on heavy equipment and vehicle systems
- 4 Demonstrate safety precautions when working on electronics

DT231 Light Duty Diesel Performance & Diagnosis/6

- 1 Confirm the operation of the compression ignition engine, including the operation of both mechanical and electronic fuel systems as well as the operation of the turbochargers.
Identify the type of fuel system and the method of metering and diagnosing fuel system related performance complaint by using factory specified procedures.
- 2 Utilize computers to research information of Diesel engines and Diesel engine fuel systems.
- 3 Collaborate with a group as a team member.

DT234 Light Duty Diesel Engine Electronic Controls/6

- 1 Relate electronic engine controls.
- 2 Apply electrical principals and testing.
- 3 Perform fuel system diagnostics.
- 4 Employ tune-up procedures on live engines.

UN295 Major Specific Capstone - Associate/3

- 1 All Program Goals

Diesel Technology - Mack/Volvo DATE AAS

Program Goals

- 1 Troubleshoot and repair Mack/Volvo medium and heavy-duty trucks according to manufacturers'
- 2 Demonstrate problem solving skills
- 3 Analyze electronic control systems
- 4 Illustrate proper tool usage
- 5 Employ the use of manufacturers' online portal
- 6 Practice safe work habits

Courses & Objectives

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU123 Electrical & Electronics I/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter
- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

DA221 DATE Computer Information Systems/6

- 1 Practice safe work habits, professionalism, time management, and tool usage
Perform diagnostic testing, programming and servicing of Mack/Volvo Trucks and components using
proprietary software
- 2
- 3 Identification of Mack/Volvo Truck history, VIN numbers, and models
- 4 Research service, troubleshooting, repair, and diagnostic
- 5 Diagnose, analyze, and repair electrical systems
- 6 Complete dealer online training to professional level

DA222 DATE Truck Systems/6

- 1 Practice safe work habits, professionalism, time management, and tool usage
- 2 Research service, troubleshooting, repair, and diagnostic information within the Mack/Volvo Truck Dealer
- 3 Perform preventive maintenance tasks
- 4 Diagnose, analyze, and repair electrical systems including cab controls and HVAC systems, SRS, steering and suspension.
- 5 Perform diagnostic testing, programming and servicing of Mack/Volvo Trucks and components using proprietary software

DA223 DATE Engines & Emissions/6

- 1 Research service, troubleshooting, repair, and diagnostic information within the Mack/Volvo Truck Dealer
- 2 Practice safe work habits, professionalism, time management, and tool usage
- 3 Perform preventive maintenance tasks
- 4 Perform Premium Tech Tool tasks
- 5 Diagnose, analyze, and repair engine and emission systems
- 6 Perform diagnostic testing, programming and servicing of Mack/Volvo Trucks and components using proprietary software
- 7 Smoke test the emission system
- 8 Perform engine overhaul procedures

DA224 DATE Drivetrains/6

- 1 Practice safe work habits, professionalism, time management, and tool usage
- 2 Research service, troubleshooting, repair, and diagnostic information within the Mack/Volvo Truck Dealer
- 3 Perform diagnostic testing, programming and servicing of Mack/Volvo Trucks and components using proprietary software
- 4 Diagnose, analyze, and repair drivetrain systems
- 5 Perform preventive maintenance inspections

DA124 Diesel Engine Diagnosis & Repair/6

- 1 Explain the operation of the compression ignition engine
- 2 Research diesel engines service and repair information
- 3 Demonstrate the ability to work within a small group and large group as a team member
- 4 Disassemble and reassemble a diesel engine using manufacturers' supplied service information
- 5 Measure and determine if they meet manufacturers' specifications

DA131 Truck Drivetrains/6

- 1 Diagnose and analyze various suspension and drivetrain-related components and problems
- 2 Define and explain the theory and operation of truck drivetrain components
- 3 Demonstrate ability to work within a small group and large group atmosphere as a team member/team

DT228 Heavy Equipment & Vehicle Integrated Electronics/6

- 1 Demonstrate proper use of meters, scan tools, and oscilloscopes
- 2 Explain basic principles of electronics and wiring schematics
- 3 Describe electrical systems on heavy equipment and vehicle systems
- 4 Demonstrate safety precautions when working on electronics

DT230 Diesel Performance & Diagnosis/6

- 1 Explain the operation of the compression ignition engine, including the operation of both mechanical and electronic fuel systems as well as the operation of the turbochargers
Identify the type of fuel system and the method of metering and diagnosing fuel system related performance complaint by using factory specified procedures
- 2 Research and retrieve information on diesel engines and diesel engine fuel systems
- 3 Demonstrate the ability to function with a group as a team member

UN295 Major Specific Capstone - Associate/3

All Program Goals

Diesel Technology - Medium/Heavy Duty AAS

Program Goals

- 1 Troubleshoot and repair medium- and heavy-duty truck systems according to NATEF standards
- 2 Communicate effectively using oral and written formats
- 3 Demonstrate problem solving skills
- 4 Analyze electronic control systems
- 5 Illustrate proper tool usage
- 6 Employ the use of manufacturers' service manuals both online and paper copies
- 7 Practice safe work habits

Courses & Objectives

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU123 Electrical & Electronics I/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter
- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

AU126 Suspension & Steering/6

- 1 Dismount, mount, and balance tires
- 2 Replace suspension and steering components through proper procedure
- 3 Diagnose vibration complaints
- 4 Perform four-wheel alignments

AU127 Hydraulic Brake Systems/6

- 1 Analyze hydraulic principles and operation of the brake systems
- 2 Explain bearings and systems that affect the braking systems
- 3 Interpret the operation of an on-car and off-brake lathe
- 4 Perform a front and rear brake job
- 5 Explain the ABS system and operation

DT119 Theory & Techniques in Welding/6

- Weld mild steel and aluminum. Use gas metal arc welding, shielded arc welding, gas tungsten arc welding, and oxygen and acetylene procedures
- 1 Weld mild steel and aluminum. Use gas metal arc welding, shielded arc welding, gas tungsten arc welding, and oxygen and acetylene procedures
 - 2 Cut mild steel and aluminum with oxygen/acetylene torch and plasma cutters
 - 3 Demonstrate ability to work within a small group and large group atmosphere as a team member/team
 - 4 Identify the operation and function of the different welding types

DT124 Diesel Engine Diagnosis & Repair/6

- 1 Explain the operation of the compression ignition engine
- 2 Research diesel engines service and repair information
- 3 Demonstrate the ability to work within a small group and large group as a team member

- 4 Disassemble and reassemble a diesel engine using manufacturers' supplied service information
- 5 Measure and determine if they meet manufacturers' specifications

DT130 Truck Air Systems, Brakes & Preventive Maintenance/6

- 1 Identify and describe procedures to troubleshoot and repair problems related to a truck's air system and brake system, including ABS and preventive maintenance inspections
- 2 Identify and describe procedures related to shop and personal safety as reflected in OSHA standards
- 3 Demonstrate prompt attendance
- 4 Demonstrate ability to work within a small group and large group atmosphere as a team member/team leader

DT131 Truck Drivetrains/6

- 1 Diagnose and analyze various suspension and drivetrain-related components and problems
- 2 Define and explain the theory and operation of truck drivetrain components
- 3 Demonstrate ability to work within a small group and large group atmosphere as a team member/team leader

DT228 Heavy Equipment & Vehicle Integrated Electronics/6

- 1 Demonstrate proper use of meters, scan tools, and oscilloscopes
- 2 Explain basic principles of electronics and wiring schematics
- 3 Describe electrical systems on heavy equipment and vehicle systems
- 4 Demonstrate safety precautions when working on electronics

DT230 Diesel Performance & Diagnosis/6

- 1 Explain the operation of the compression ignition engine, including the operation of both mechanical and electronic fuel systems as well as the operation of the turbochargers
- 2 Identify the type of fuel system and the method of metering and diagnosing fuel system related performance complaint by using factory specified procedures
- 3 Research and retrieve information on diesel engines and diesel engine fuel systems
- 4 Demonstrate the ability to function with a group as a team member

DT235 Diesel Engine Electronic Controls/6

- 1 Analyze electronic engine controls
- 2 Apply electrical principles and testing
- 3 Demonstrate fuel system diagnostics
- 4 Demonstrate tune-up procedures on live engines

HY130 Hydraulics/6

- 1 Diagnose, disassemble, repair, and assemble hydraulic systems

- 2 Explain the theory and operating principles of pumps, motors, valves, cylinders, accumulators, hydrostatic drives, seals, and types of fluids
- 3 Use hydraulic symbols to create hydraulic schematic diagrams
- 4 Practice safe work habits specific to hydraulic systems

UN295 Major Specific Capstone - Associate/3

- 1 All Program Goals

High Performance Technology AAS

Program Goals

- 1 Design, fabricate, and install components that are compliant within specific high performance standards
- 2 Demonstrate the use of testing equipment used in the high performance industry
- 3 Troubleshoot, analyze, diagnose, and repair performance problems
- 4 Design, fabricate, and install components in a high performance vehicle engine assembly
- 5 Employ the use of paper manuals and online resources
- 6 Design, install, and test a high performance vehicle suspension
- 7 Design, install, and test a high performance vehicle driveline

Courses & Objectives

HP105 HP Accessory Trends/6

- 1 Install window tint
- 2 Construct a speaker box
- 3 Construct a fiberglass kick panel
- 4 Tune an audio system

HP110 HP Welding/6

- 1 Apply TIG welding on mild steel, aluminum magnesium, and chromoly
- 2 Perform Oxyfuel welding and cutting

HP130 HP Engine Machining/6

- 1 Inspect, clean, and evaluate components for machining
- 2 Perform machining procedures on engine components
- 3 Adhere to industry standards

HP215 HP Fabrication/6

- 1 Utilize various methods of sheet metal panel forming

- 2 Fabricate tubing
- 3 Utilize machining equipment correctly
- 4 Employ proper and safe racecar construction methods

HP217 HP Suspension & Steering/6

- 1 Determine the rate of a spring
- 2 Scale a racecar
- 3 Align a front end
- 4 Set up the front suspension
- 5 Set up the rear suspension
- 6 Revalve and dyno test shocks

HP228 HP Drive Lines/6

- 1 Calculate gear ratios
- 2 Set up and assemble HP clutches
- 3 Set up and assemble HP rear-ends
- 4 Modify and assemble HP manual transmissions
- 5 Modify and assemble HP automatic transmissions

HP240 HP Fuel/Electronics/Ignition Systems/6

- 1 Perform airflow testing and porting on cylinder heads
- 2 Perform fuel system changes to obtain maximum performance on engines using dynamometer testing
Perform ignition system changes to obtain maximum performance on engines utilizing dynamometer testing
- 3 testing

HP245 HP Custom Engine Building/6

- 1 Perform machining operations used in the high performance industry for engine building
- 2 Select proper components for high performance engine building
- 3 Assemble engines for the high performance industry

UN295 Major Specific Capstone/3

- 1 All Program Goals

Heating Ventilation Air Conditioning (HVAC) AAS

Program Goals

- 1 Work safely and responsibly within all shop safety and environmental guidelines and standards

- 2 Perform HVAC system and fabrication, installation, maintenance, and troubleshooting relevant to codes and industry practices
- 3 Articulate the purpose and operation of HVAC system components
- 4 Use technology and appropriate test equipment and tools to test and repair various types of residential and light commercial HVAC equipment
- 5 Perform basic business, employability, and customer service skills as related to the HVAC industry
- 6 Work independently and in groups to service, repair, test, and maintain various types of residential and light commercial heating/refrigeration equipment
- 7 Read and interpret electrical diagrams
- 8 Communicate clearly and effectively with coworkers and customers while describing technical requirements and specifications

Courses & Objectives

HV110 Service & Procedures/6

- 1 Explain the refrigeration cycle
- 2 Analyze the process of recovery, evacuation, and charging
- 3 Perform brazing and soldering
- 4 Identify the refrigeration components and proper operation of these components
- 5 Apply gas laws to HVAC/R systems

HV115 Electrical & Electronics/6

- 1 Apply electrical theory to HVAC
- 2 Utilize electrical schematics
- 3 Wire basic circuits
- 4 Troubleshoot electrical circuits
- 5 Examine electrical components and relate how they are used in HVAC

HV120 Air Conditioning Systems & Controls/6

- 1 Perform installation practices of split system and package unit air conditioning units
- 2 Relate normal operating pressures and temperatures of air conditioning systems
- 3 Troubleshoot air conditioning systems and perform the required repairs
- 4 Utilize psychometrics and apply them to HVAC
- 5 Differentiate ductwork systems and the proper installation of ductwork systems

HV125 Heating Systems & Controls/6

- 1 Differentiate between standard efficiency, mid efficiency, and high efficiency furnaces

- 2 Differentiate between furnaces operating on natural gas, propane, and fuel oil furnaces
- 3 Collect proper manifold pressure readings and be able to adjust gas valve if needed
- 4 Relate general components of a gas-fired furnace
- 5 Identify general components of a fuel oil fired furnace and adjust the nozzle assembly
- 6 Perform combustion analysis of gas and fuel oil furnaces and make adjustments based on those readings

HV210 Refrigeration Systems & Controls/6

- 1 Interpret Superheat readings on refrigeration units
- 2 Interpret Subcool reading on refrigeration units
- 3 Determine proper refrigerants used on refrigeration equipment
- 4 Determine proper running pressures and temperatures based on type of system
- 5 Troubleshoot problems with refrigeration units and propose a possible solution to the problem

HV215 Heat Pump Systems & Controls/6

- 1 Predict proper operating pressures and temperatures for heat pump systems
- 2 Identify different defrost cycles of heat pump systems
- 3 Apply the principles of different types of heat pump systems including geothermal
- 4 Identify the different components used on heat pump systems
- 5 Troubleshoot the various types of heat pump systems

HV220 Service & Procedures II/6

- 1 Utilize retrofitting procedures and practices
- 2 Complete EPA 608 Certification
- 3 Identify practices of preventative maintenance
- 4 Utilize pressure enthalpy charts to check system performance
- 5 Compile properly filled out paperwork

HV225 Special Topics & Applications of Refrigeration & Temperature Controls/6

- 1 Perform and apply load calculations
- 2 Explain the theories of solar energy and how it is applied to the HVAC industry
- 3 Explain the basic theories of wind energy and how it is applied to the HVAC industry
- 4 Apply customer relations and soft skills
- 5 Complete related paperwork appropriately

UN295 Major Specific Capstone - Associate/3

- 1 All Program Goals

Hybrid Electric Vehicle Technology AAS

Program Goals

- 1 Troubleshoot and analyze HV systems, components, batteries, and battery management systems
- 2 Identify different types of hybrid vehicle architecture
Demonstrate the use of electrical testing equipment and the types of maintenance required for hybrid/electric vehicles
- 3
- 4 Students will evaluate, diagnose, and repair tires, steering, suspension, and brake system issues
Students will assess the operation of a heating and air conditioning system as well as accurately diagnose and repair the system as per manufacturer's procedures
- 5 Students will evaluate the operation of HEV engines and motors, ignition and fuel systems and analyze, diagnose, and repair faults.
- 6 management system to analyze proper operation of the systems then accurately diagnose and repair drivability issues in accordance with the customer concerns.
- 7
- 8 Practice safe work habits while utilizing high voltage systems

Courses & Objectives

AU118 Transportation Heating Ventilation Air Conditioning/6

- 1 Interpret the air conditioning refrigeration diagram
- 2 Examine air conditioning fundamentals and components
- 3 Analyze engine cooling systems
- 4 Explain air conditioning electrical and climate control systems
- 5 Apply EPA regulations - retrofitting and new refrigerants
- 6 Apply EPA approved recovery equipment and procedures

AU122 Automotive Engine Diagnosis & Repair/6

- 1 Measure engine components
- 2 Appraise cooling system operation
- 3 Analyze lubrication system operation
- 4 Verify valve train components and operations
- 5 Differentiate short block components and operations

AU123 Electrical & Electronics I/6

- 1 Differentiate the characteristics of electricity
- 2 Perform electrical testing using a digital multi-meter

- 3 Navigate wiring diagrams
- 4 Diagnose and repair battery, starter, and charging systems
- 5 Perform a voltage drop test and interpret the results

AU126 Suspension & Steering/6

- 1 Dismount, mount, and balance tires
- 2 Replace suspension and steering components through proper procedure
- 3 Diagnose vibration complaints
- 4 Perform four-wheel alignments

AU228 Electrical & Electronics II/6

- 1 Apply the principles of electronics as it applies to the automotive and high performance fields restraints, power train controls, cruise control, and electronic instrumentation, advanced lighting systems, and electronic heating and air conditioning
- 2
- 3 Apply proper safety precautions when dealing with all electrical and electronic equipment

AU230 Automotive Engine Performance/6

- 1 Analyze the fundamentals of internal combustion engines
- 2 Compare the operation of ignition systems
- 3 Differentiate the operation of fuel systems
- 4 Categorize the operation of emission systems
- 5 Diagnose engine, fuel systems, and ignition systems

AU232 Computerized Engine Control Systems/6

- 1 Assemble computerized engine components
- 2 Integrate diagnostics concepts
- 3 Manage OBD II and multiplexing operations
- 4 Perform diagnostics on various manufacturers' computer control systems

AU236 Hydraulic/Electric Braking/6

- 1 Analyze Hydraulic Principles and operation of brake systems
- 2 Understand vacuum boosters and electric brake assist
- 3 Explain bearings and systems that affect the braking systems
- 4 Understand how to use an on-car brake lathe
- 5 Perform a front and rear disc brake job
- 6 Explain the ABS system and operation
- 7 Explain advanced braking system

AU237 Electrical & Electronic III/6

- 1 Understand and display safe working practices associated with high voltage systems
- 2 Distinguish the differences between low voltage and high voltage electrical systems
- 3 Understand high voltage batteries pertaining to Hybrid and full electric vehicles, battery management systems and high voltage batter isolation and disconnect procedures
- 4 Understand high voltage charging systems associated with high voltage batteries
- 5 Understand alternating current theory and AC circuit analysis
- 6 Understand electric motor operation, motor control systems, and testing using an oscilloscope, digital multimeter, and Scan-tools
- 7 Perform elective vehicle specific diagnostics

AU238 Advanced Technology Vehicles/6

- 1 Test and evaluate HV battery pack health
- 2 Diagnose Hybrid and Electric drivetrain
- 3 Evaluate the proper repair
- 4 Utilize the specialized equipment to come to a diagnosis using analytical critical thinking

UN295 Major Specific Capstone - Associate/3

- 1 All Program Goals

Robotics and Automation - AAS

Program Goals

- 1 Utilize critical thinking skills to solve technical problems
- 2 Develop teamwork and leadership skills
- 3 Demonstrate competency in use of equipment and tools used in manufacturing processes
- 4 Troubleshoot and repair robot components and systems
- 5 Program, interface, and integrate programmable logic controllers
- 6 Read and interpret electrical, hydraulic, and pneumatic diagrams
- 7 Practice safe work habits
- 8 Communicate effectively either orally or in writing

Courses & Objectives

RA110 Automation Mechanical/6

- 1 Demonstrate the ability to disassemble, inspect, repair, and reassemble various robot mechanical units.
- 2 Demonstrate the ability to remove and install various types of bearings.

- 3 Drill and tap a hole for a specified screw.
- 4 Demonstrate the ability to properly use a torque wrench.
- 5 Use a micrometer and a Vernier caliper to take measurements.
- 6 Demonstrate the ability to remove and install motor shaft couplings.
- 7 Demonstrate and use the appropriate Personal Protective Equipment in the shop area.
- 8 Perform basic lubrication and preventive maintenance on a robot mechanical unit.

RA115 Fluid Power/6

- 1 Interpret hydraulic and pneumatic schematic diagrams.
- 2 Select and connect hydraulic and pneumatic components to construct a circuit.
- 3 Test a hydraulic or pneumatic circuit for proper operation.
- 4 Diagnose and repair faults in hydraulic and pneumatic systems.
- 5 Compute the proper size hoses, pipes, and fittings needed to construct a circuit.
- 6 Explain the difference between hydraulics and pneumatics.
- 7 Discuss the different types of hydraulic fluids and additives.

RA120 Automation Electrical/6

- 1 Interpret the basic concepts of AC and DC voltage and how it is utilized in industry.
- 2 Analyze methods of harnessing electricity and components used to control it.
- 3 Investigate how electrical current is transformed to meet specific needs.
- 4 Read and write simple electrical diagrams.
- 5 Wire simple circuits in a safe and effective manner.
- 6 Choose testing devices used for troubleshooting.

RA130 AC/DC Motors & Controls/6

- 1 Demonstrate a basic knowledge of the fundamentals of AC and DC motors and how they operate.
- 2 Distinguish between AC and DC motors and how they are controlled.
- 3 Identify the advantages and disadvantages of AC and DC motors.
- 4 Confirm if the AC or DC motors is more appropriate for a specified application.
- 5 Install and troubleshoot AC and DC motors.
- 6 Program and troubleshoot motor controls.
- 7 Create a safe work environment for all hands-on activities.

RA150 Industrial Fabrication/6

- 1 Interpret mechanical prints
- 2 Describe general safety practices when working with metal
- 3 Describe the different types of mechanical drawings

- 4 Create a layout using layout dye and measuring equipment
- 5 Setup and weld with a MIG and TIG welder
- 6 Create parts used in industry

RA205 Programmable Logic Controllers (PLC)/6

- Examine the principles and fundamentals of what a PLC is, it's various components, and how it functions as a process controller.
- 1
 - 2 Apply ladder logic and be able to change program data.
 - 3 Interface other automation equipment with the programmable logic controller.
 - 4 Monitor I/O data and force inputs and outputs for troubleshooting purposes.
 - 5 Explain Ethernet industrial protocol and its use for network communications.
 - 6 Troubleshoot all components of a network system for faults and system failure.

RA210 Robotics Integration/6

- 1 Demonstrate how to safely power-up, jog, and power down a robot.
- 2 Identify the safety devices on a robot and controller.
- 3 Use the teach pendant to program the robot.
- 4 Use the teach pendant to isolate robot/system faults and repair those faults.
- 5 Use the teach pendant to monitor and control robot input/output signals.
- 6 Back-up and restore robot programs/software.

RA215 Automation Controls & Network Integration/6

- 1 Integrate various sensing devices (pressure, temperature, level, motion, and position).
- 2 Utilize ac and dc motor controllers.
- 3 Integrate fundamentals of stepper motor and servo motor.
- 4 Program stepper and servo motor parameters.
- 5 Analyze stepper and servo motor controls.
- 6 Test servo drives.
- 7 Detect feedback mechanisms (resolver – encoder).
- 8 Integrate HMI (human machine interface) fundamentals.
- 9 Manage HMI screen set-up.
- 10 Interface HMI with plc.
- 11 Network HMI/plc/robot X.

RA220 "The Work Cell"/6

- 1 Differentiate the three distinct types of a work cell and how part transfer is achieved in each.
- 2 Guard a work cell to eliminate potential hazards.

- 3 Utilize interlocking devices used to protect the worker and the equipment.
- 4 Identify potential dangers of the work cell.
- 5 Minimize dangers of the work cell by using special sensing and programming techniques.

RA298 Robotics & Automation Capstone/3

- 1 All Program Goals

Accounting AAB

Program Goals

- 1 Prepare the complete accounting cycle.
- 2 Understand and apply GAAP, GASB, and managerial accounting.
- 3 Apply ethics in decision making.
- 4 Prepare individual and payroll tax returns under federal and state laws.
- 5 Familiarize students with accounting software.

Course Objectives

AC114 Accounting I/5

- 1 Complete basic accounting transactions
- 2 Complete basic adjusting and closing entries
- 3 Prepare three financial statements from accounting data
- 4 Use basic accounting terminology

AC115 Accounting II/5

- 1 Compare features of different business organizational structures (partnership, corporation)
- 2 Compare proper accounting for basic depreciation methods
- 3 Identify inventory methods and their effect on the balance sheet/ income statement
- 4 Prepare accounting transactions for receivables and liabilities

AC118 Accounting III/5

- 1 Calculate proper amortization of bond discounts and premiums
- 2 Create a cash flow statement along with other financial statements
- 3 Differentiate and discuss methods for handling investments in other companies
- 4 Compute bond premiums and discounts using present value factors

AC122 Payroll Accounting/5

- 1 Apply current tax calculation and deductions to payroll
- 2 Identify various payroll laws and regulations
- 3 Prepare payroll transactions and accounting entries
- 4 Translate data onto payroll tax forms

AC130 Introduction to Accounting Software/3

- 1 Analyze features and advantages of accounting software
- 2 Prepare and record end-of-cycle activities and print reports

- 3 Record business transactions in a computerized system

AC202 Managerial Accounting/5

- 1 Categorize various types of costs
- 2 Compute cost volume profit analysis
- 3 Differentiate between costing for a job order cost system and a process cost system
- 4 Formulate variances and analyze the results
- 5 Prepare budgets
- 6 Use activity based costing and traditional methods to apply overhead

AC212 Individual Taxes/5

- 1 Differentiate included and excluded income
- 2 Identify deductions FOR adjusted gross income and deductions TO adjusted gross income
- 3 Identify various federal income tax laws and regulations
- 4 Prepare an individual federal income tax return

AC221 Intermediate Accounting I/5

- 1 Analyze earnings management by comparing net income to cash flow
- 2 Apply accounting information to prepare financial statements with full disclosure
- 3 Differentiate types of inventory systems and compare the significance of the various inventory tracking methods
- 4 Verify the costs and benefits of cash management and accounts receivable management

AC222 Intermediate Accounting II/5

- 1 Categorize types of leases
- 2 Detect costs associate with acquisition, utilization, and retirement of non-current operating assets
- 3 Detect the benefits and costs associated with debt financing and equity financing
- 4 Examine why companies invest in debt and equity securities and demonstrate their effect on financial statements

AC223 Intermediate Accounting III/5

- 1 Calculate earnings per share and identify the impact of stock dividends, stock splits, and weighted average on capital
- 2 Calculate income taxes for an entity using current tax law
- 3 Distinguish the necessary supplemental disclosures of financial information by product line and geographic area
- 4 Illustrate both employer and employee compensation for employment and post-employment compensation issues
- 5 Illustrate the importance of interim reports and outline the preparation difficulties

AC226 Governmental & Not-for-Profit Accounting/5

- 1 Prepare individual fund financial statements as well as government-wide financial statements using GASB
- 2 Record basic fund accounting entries including budget entries for the general fund using GASB standards

AC292 Accounting Capstone/3

- 1 Program Goals

Accounting BS

Program Goals

- 1 Prepare the complete accounting cycle.
- 2 Understand and apply GAAP, GASB, and managerial accounting.
- 3 Apply ethics in decision making.
- 4 Prepare individual and payroll tax returns under federal and state laws.
- 5 Familiarize students with accounting software.
- 6 Design and implement internal control measures using current and relevant accounting and business analytic technology.
- 7 Prepare comprehensive financial statements.
- 8 Interpret complex individual and corporate tax transactions.
- 9 Understand managerial accounting at a professional level.

Course Objectives

AC114 Accounting I/5

- 1 Complete basic accounting transactions
- 2 Complete basic adjusting and closing entries
- 3 Prepare three financial statements from accounting data
- 4 Use basic accounting terminology

AC115 Accounting II/5

- 1 Compare features of different business organizational structures (partnership, corporation)
- 2 Compare proper accounting for basic depreciation methods
- 3 Identify inventory methods and their effect on the balance sheet/ income statement
- 4 Prepare accounting transactions for receivables and liabilities

AC212 Individual Taxes/5

- 1 Differentiate included and excluded income
- 2 Identify deductions FOR adjusted gross income and deductions TO adjusted gross income
- 3 Identify various federal income tax laws and regulations
- 4 Prepare an individual federal income tax return

AC118 Accounting III/5

- 1 Calculate proper amortization of bond discounts and premiums
- 2 Create a cash flow statement along with other financial statements
- 3 Differentiate and discuss methods for handling investments in other companies
- 4 Compute bond premiums and discounts using present value factors

AC130 Introduction to Accounting Software/3

- 1 Analyze features and advantages of accounting software
- 2 Prepare and record end-of-cycle activities and print reports
- 3 Record business transactions in a computerized system

AC202 Managerial Accounting/5

- 1 Categorize various types of costs
- 2 Compute cost volume profit analysis
- 3 Differentiate between costing for a job order cost system and a process cost system
- 4 Formulate variances and analyze the results
- 5 Prepare budgets
- 6 Use activity based costing and traditional methods to apply overhead

AC221 Intermediate Accounting I/5

- 1 Analyze earnings management by comparing net income to cash flow
- 2 Apply accounting information to prepare financial statements with full disclosure
- 3 Differentiate types of inventory systems and compare the significance of the various inventory tracking methods
- 4 Verify the costs and benefits of cash management and accounts receivable management

AC222 Intermediate Accounting II/5

- 1 Categorize types of leases
- 2 Detect costs associate with acquisition, utilization, and retirement of non-current operating assets
- 3 Detect the benefits and costs associated with debt financing and equity financing
- 4 Examine why companies invest in debt and equity securities and demonstrate their effect on financial statements

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- 1 stock splits, and weighted average on capital
- 2 Calculate income taxes for an entity using current tax law
- 3 Distinguish the necessary supplemental disclosures of financial information by product line and geographic area
- 4 Illustrate both employer and employee compensation for employment and post-employment compensation issues
- 5 Illustrate the importance of interim reports and outline the preparation difficulties

AC226 Governmental & Not-for-Profit Accounting/5

- 1 Prepare individual fund financial statements as well as government-wide financial statements using GASB
- 2 Record basic fund accounting entries including budget entries for the general fund using GASB standards

AC301 Cost Accounting I/5

- 1 Allocate costs and prepare budgets
- 2 Analyze actual, normal, and standard cost systems
- 3 Assess costs and expenditures in a manufacturing, retail, or services business
- 4 Prepare and evaluate variance as well as segment reporting
- 5 Devise ABC cost systems by recognition of cost drivers

AC310 Business Taxes/5

- 1 Integrate earnings and deductions for partnerships and corporations
- 2 Prepare and assess business tax forms and reports

AC375 Accounting Professional Ethics/3

- 1 Assess ethical theories and decision-making models as they relate to decisions being made
- 2 Detect ethical dilemmas and how to resolve them in accordance with various codes of ethics required of
- 3 Examine the effects of SOX on corporate governance and accounting risks and decisions

AC405 Accounting Information Systems/5

- 1 Correlate how SOX regulations affect analysis of financial statements, manually and computerized
- 2 Evaluate various accounting cycles to include internal controls
- 3 Illustrate data, systems, and program flows via flowcharts

AC414 Auditing/5

- 1 Compile relevant generally accepted auditing standards and procedures to business entities
- 2 Evaluate risks and internal controls to ensure compliance with SOX requirements
- 3 Examine documents and financial reports to detect fraudulent accounting practices
- 4 Utilize auditing/accounting terminology

AC415 Auditing II/5

- 1 New course currently in development

AC435 Advanced Accounting I/5

- 1 Assess parent/subsidiary relationships
- 2 Create consolidation journal entries
- 3 Justify the equity method for investments
- 4 Prepare working papers and consolidated financial statements

AC436 Advanced Accounting II/5

- 1 Compare IFRS with U.S. GAAP
- 2 Examine procedures involved in bankruptcy liquidations and reorganizations
- 3 Manage a partnership from inception through liquidation to include investments, inventory, etc.
- 4 Prepare financial reporting for partnerships and corporations, including interim and segment reporting
- 5 Translate and appraise foreign currency transactions

AC490 Accounting Capstone/3

- 1 Program Goals

Business Administration AAB

Program Goals

- 1 Apply basic financial and accounting skills.
- 2 Apply management principles.
- 3 Demonstrate core legal and ethical knowledge.
- 4 Demonstrate knowledge of basic principles of marketing.
- 5 Interpret economic concepts affecting companies at both the macroeconomic and microeconomic levels.

Course Objectives

BU220 Managerial Accounting for Business/3

- 1 Calculate various financial information, such as breakeven point
- 2 Categorize types of costs and their drivers
- 3 Compute variances and determine alternative corrective actions
- 4 Use cost-volume-profit relationships to determine desired profitability
- 5 Examine cost-volume-profit relationships

BU240 International Business I/5

- 1 Analyze the evolution of trade
- 2 Examine how trade is affected by political and legal systems and government intervention
- 3 Integrate cultural awareness in various political/legal, economic, and social situations
- 4 Interpret international trade theories including the government's role in international trade
- 5 Convert currency exchange
- 6 Articulate compose in the terminology of global business

EC225 Macroeconomics/5

- 1 Compare the Keynesian and Classical macroeconomic theories
- 2 Evaluate the rationale for monetary and fiscal policy to regulate the economy
- 3 Explain supply and demand (individual and aggregate), opportunity costs, and marginal analysis
- 4 Identify components of the gross domestic product (GDP)
- 5 Illustrate business cycle components and their relationship to inflationary and recessionary periods
- 6 Investigate factors that affect aggregate supply and demand

EC235 Microeconomics/5

- 1 Analyze decision making based on level of industry competition
- 2 Assess decision-making scenarios that include quantity and price and entry and exit from the industry
- 3 Compare price elasticity of demand and price elasticity of supply
- 4 Describe and give examples of the costs of production and revenue structure of businesses
- 5 Distinguish opportunity costs and marginal analysis

FI210 Principles of Finance/5

- 1 Compare characteristics of stocks, bonds, mutual funds, and various money market instruments
- 2 Apply basic business tools and techniques of business finance to solve fundamental business decision-making
- 3 Categorize the types of financial institutions and their relationship and effect on the business environment
- 4 Compare the risk/return relationships
- 5 Correlate the time value of money and its usages
- 6 Use basic financial terminology appropriately
- 7 Apply time value of money to solve fundamental business and personal financial problems
- 8 Recognize the effects of the risk/return relationships
- 9 Describe the issuing of securities and the movement of cash flows from financial intermediation and the roles of the various financial institutions involved

MA121 Principles of Management/5

- 1 Describe business environment scenarios (internal and external)
- 2 Discuss scenarios that address social responsibility of business
- 3 Explain how management functions can be executed in a variety of circumstances
- 4 Identify the history of management and how it has shaped today's management techniques

MT150 Principles of Marketing/5

- 1 Demonstrate knowledge of marketing concepts such as consumer satisfaction and relationship management
- 2 Design a marketing plan using all elements of the marketing mix (product, price, place, promotion)

- 3 Discuss case scenarios reflecting a variety of issues related to social responsibility in marketing
- 4 Employ a marketing strategy using segmenting, targeting, and positioning

Business Administration BS

Program Goals

- 1 Apply basic financial and accounting skills
- 2 Apply and compare management principles
- 3 Demonstrate and evaluate core legal and ethical knowledge and formulate a moral perspective
- 4 Demonstrate and implement knowledge of basic principles of marketing
- 5 Interpret and investigate economic concepts affecting companies at both the macroeconomic and microeconomic levels
- 6 Analyze international dimensions affecting US companies
- 7 Examine the impact of individuals, groups, and organizational systems on organizations
- 8 Utilize knowledge of accounting and financial skills to make decisions
- 9 Correlate strategic management and business policy

Course Objectives

BU220 Managerial Accounting for Business/3

- 1 Calculate various financial information, such as breakeven point
- 2 Categorize types of costs and their drivers
- 3 Compute variances and determine alternative corrective actions
- 4 Use cost-volume-profit relationships to determine desired profitability
- 5 Examine cost-volume-profit relationships

BU240 International Business I/5

- 1 Analyze the evolution of trade
- 2 Examine how trade is affected by political and legal systems and government intervention
- 3 Integrate cultural awareness in various political/legal, economic, and social situations
- 4 Interpret international trade theories including the government's role in international trade
- 5 Convert currency exchange
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- 3 Explain supply and demand (individual and aggregate), opportunity costs, and marginal analysis
- 4 Identify components of the gross domestic product (GDP)
- 5 Illustrate business cycle components and their relationship to inflationary and recessionary periods
- 6 Investigate factors that affect aggregate supply and demand

EC235 Microeconomics/5

- 1 Analyze decision making based on level of industry competition
- 2 Assess decision-making scenarios that include quantity and price and entry and exit from the industry
- 3 Compare price elasticity of demand and price elasticity of supply
- 4 Describe and give examples of the costs of production and revenue structure of businesses
- 5 Distinguish opportunity costs and marginal analysis

FI210 Principles of Finance/5

- 1 Compare characteristics of stocks, bonds, mutual funds, and various money market instruments
- 2 Apply basic business tools and techniques of business finance to solve fundamental business decision-making
- 3 Categorize the types of financial institutions and their relationship and effect on the business environment
- 4 Compare the risk/return relationships
- 5 Correlate the time value of money and its usages
- 6 Use basic financial terminology appropriately
- 7 Apply time value of money to solve fundamental business and personal financial problems
- 8 Recognize the effects of the risk/return relationships
- 9 Describe the issuing of securities and the movement of cash flows from financial intermediation and the roles of the various financial institutions involved

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- 4 Identify the history of management and how it has shaped today's management techniques

MT150 Principles of Marketing/5

- 1 Demonstrate knowledge of marketing concepts such as consumer satisfaction and relationship management
- 2 Design a marketing plan using all elements of the marketing mix (product, price, place, promotion)
- 3 Discuss case scenarios reflecting a variety of issues related to social responsibility in marketing
- 4 Employ a marketing strategy using segmenting, targeting, and positioning

BU320 Legal Issues in Consumer Sales Transactions

- 1 Examine various agency relationships and the federal laws applicable to employment.
- 2 Analyze issues impacting possession and title of personal property
- 3 Confirm product liability laws
- 4 Integrate insurance issues in consumer sales
- 5 Analyze parties dues and rights, including remedies, under a sales agreement.

BU325 Legal Issues in Commercial Transactions/5

- 1 Integrate basic legal concepts, principles, & terminology in relation to business transactions.
- 2 Research negotiable instruments, secured transactions, bankruptcy, and insurance law.

BU490 Business Capstone/3

All Program Goals

FI420 Corporate Finance/5

- 1 Integrate the financial goal of increasing shareholders' wealth which includes risk, timing and size of cash flows into business decisions
- 2 Recommend and justify net working capital policies to determine how to increase shareholders' wealth
- 3 Recommend and justify capital budget decisions to determine those that will to increase shareholders' wealth
- 4 Assess the impact of various capital structures on shareholders' wealth
- 5 Recommend and justify dividend policies to determine those that will to increase shareholders' wealth.

MA322 Organizational Behavior/5

- 1 Analyze various organizational situations
- 2 Assess personal beliefs about organizational behavior
- 3 Evaluate the current and historical social and psychological theories that shape management's interaction with employees in the areas of motivation, behavioral modification, and team building
- 4 Formulate tactics for an effective manager
- 5 Investigate workplace behavior from the perspective of individuals, groups, or organizational system

MA340 Leadership/5

- 1 Analyze key leadership functions, traits, and characteristics
- 2 Compare early and contemporary leadership theories
- 3 Demonstrate team and organizational leadership skills

MA406 Information Management/3

- 1 Distinguish what information systems are in today's society.
- 2 Examine basic infrastructure of information systems.

- 3 Evaluate how information systems are used in today's digital age.

MA447 Global Management Issues/5

- 1 Appraise the effects of internal and external environmental forces on organizations and managers
- 2 Appraise international trade theories including the government's role in international trade
- 3 Evaluate the social responsibility of business, including its obligations toward the environment and sustainability
- 4 Evaluate the standards for consumer product safety, product quality, and fair pricing
- 5 Incorporate cultural awareness in various political/legl, economic, and social situations
- 6 Relate the importance of international business and known management theories to global situations

MA475 Strategic Management & Business Policy/5

- 1 Assess strategic leadership qualities and styles
- 2 Compare the contrast different types of management strategies
- 3 Embed the strategic management process to improve organizational performance
- 4 Manage the process of internal and external environmental analysis

Human Resource Management AAB

Program Goals

- 1 Process, verify, and maintain personnel-related documentation, including staffing, recruitment, training, grievances, performance evaluations, classifications, and employee leaves of absence
- 2 Explain company personnel policies, benefits, and procedures to employees or job applicants related to employee laws, regulations, and rights
- 3 Develop skills and methods to communicate with employees and business stakeholders
- 4 Apply business management acumen with human resource functions

Course Objectives

HR 110 - INTRODUCTION TO HUMAN RESOURCE MANAGEMENT

- 1 Identify the fundamental functions of human resource management within a business environment
- 2 Describe the staffing planning process
- 3 Explain the components and importance of the job analysis, job descriptions, and job specification
- 4 Identify legal responsibilities for safety and health that align with OSHA inspection and enforcement process
- 5 Create a recruiting and selection plan

HR 130- HR LABOR RELATIONS

- 1 Relate the responsibility of Management, Labor, and Government within labor relations

- 2 Identify the process to incorporate a union within an existing business
- 3 Recognize the impact of the various labor relation laws on unions and management
- 4 Classify the difference between mediation and arbitration
- 5 Discuss the importance and impact of management and labor collaboratively working together
- 6 Explain the history of labor relations

HR 150 - HR COMPENSATION & BENEFITS

- 1 Identify the types of compensation and benefits
- 2 Explain the legal responsibilities of compensation and benefits
- 3 Discuss the strategies that companies utilize to compensate employees
- 4 Discuss the strategies that companies have when choosing benefits for employees
- 5 Communicate compensation and benefit packages to employees
- 6 Analyze compensation and benefits within industry
- 7 Create a competitive salary and benefits package within a business industry

HR 170 – HR TRAINING AND DEVELOPMENT

- 1 Identify the various methods used to train new and existing employees and managers
- 2 Identify key actions to develop existing employees to initiate personal and company growth
- 3 Explain the difference between training and development
- 4 Communicate the goals of a training and development plan
- 5 Recognize the process to include diversity and inclusion within training
- 6 Describe the proper onboarding process
- 7 Plan a business training session

HR 210- HR POLICY & STRATEGY

- 1 Describe the Importance of HR policies in organizations
- 2 Explain the importance of organizational code of conduct
- 3 Create basic organizational HR policies
- 4 Analyze and differentiate organizational mission and vision statements

HR 230- HR CONFLICT RESOLUTION

- 1 Describe Human Resource conflict within the workplace
- 2 Identify techniques involved in the negotiation process to solve conflict
- 3 Analyze possible biases within conflict and negotiation process
- 4 Explain the importance of critical thinking within a conflict or negotiation situation
- 5 Utilize conflict and negation skills

HR 250 – HR LAW

- 1 Explain the impact of local, state, and federal laws on employee- employer relationships
- 2 Describe the different types of discrimination law that exists within Human Resources
- 3 Analyze the legal implications within the functions of Human Resource Management
- 4 Identify the penalties that businesses can incur for disregarding legal mandates within Human Resource
- 5 Diagnose legal dilemma's that occur within business regarding Human Resource Law

HR 290- HR PRACTICUM

- 1 Research the various types of jobs available for graduates in the HR industry
- 2 Analyze the Certification options within the HR industry
- 3 Synthesize knowledge, skills and abilities of HR industry by working as an intern in the HR industry.

Marketing AAB

Program Goals

- 1 Apply the basic principles of marketing
- 2 Apply business principles to the marketing environment
- 3 Design integrated branded promotions/programs/presentations
- 4 Articulate the value proposition of a good or service to key stakeholders
- 5 Apply marketing skills, which can include negotiating, planning, prioritizing, and leading, to manage the marketing process
- 6 Assess concepts and principles related to the legal, ethical, and regulatory issues in marketing

Course Objectives

MT150 Principles of Marketing/5

- 1 Demonstrate knowledge of marketing concepts such as consumer satisfaction and relationship management
- 2 Design a marketing plan using all elements of the marketing mix (product, price, place, promotion)
- 3 Discuss case scenarios reflecting a variety of issues related to social responsibility in marketing
- 4 Employ a marketing strategy using segmenting, targeting, and positioning

MT160 Professional Selling/3

- 1 Describe customer value and the salesperson's role

- 2 Examine the evolution and alternative approaches to personal selling
- 3 Explain effective selling skills
- 4 Identify personal selling and how people buy

MT226 Retailing/3

- 1 Apply key concepts related to retail management strategies
- 2 Compare merchandise planning and pricing strategies
- 3 Design a plan (incorporating basic retail strategies) on how to gather information about a desired consumer target market
- 4 Utilize strategies to build brand awareness with target audiences

MT233 Graphic Design for Marketing/3

- 1 Understanding of graphic design tools and techniques
- 2 Familiar with layout and design industry protocols
- 3 Knowledge taking a project from concept to distribution
- 4 Apply knowledge learned to marketing applications
- 5 Functional with Adobe Photoshop and InDesign
- 6 Awareness to the creative process

MT234 Website Management for Marketing/3

- 1 Identify various components of an effective website.
- 2 Explain the positives and negatives of creating websites on different platforms.
- 3 Demonstrate how to edit websites for clients.
- 4 Analyze the process of managing a website to effectively represent the plans and campaigns for an organization or client.

MT246 Integrated Branded Promotions/5

- 1 Adapt use of various media
- 2 Analyze ethical and regulatory issues
- 3 Create effective messaging
- 4 Plan and assess campaigns

MT256 Social Media/3

- 1 Develop students' expertise in navigating and utilizing diverse social media platforms such as Facebook, Instagram, Twitter, and LinkedIn, enabling them to craft and optimize tailored marketing campaigns for each.

- 2 Equip students with the ability to conceptualize, plan, and execute impactful influencer marketing strategies on social media, including identifying suitable influencers, negotiating partnerships, and measuring the outcomes on brand awareness and engagement
- 3 Enable students to create compelling and shareable content through blogging and vlogging, teaching them the art of optimizing content for various platforms and understanding the role of storytelling and visuals in enhancing brand messaging and customer engagement
- 4 Provide students with insights into the strategic use of social media for business-to-consumer interactions, encompassing social selling techniques, analytics-driven customer profiling, and relationship-building skills to integrate social media effectively

Marketing BS

Program Goals

- 1 Apply the basic principles of marketing
- 2 Apply business principles to the marketing environment
- 3 Design integrated branded promotions/programs/presentations
- 4 Articulate the value proposition of a good or service to key stakeholders
- 5 Apply marketing skills, which can include negotiating, planning, prioritizing, and leading, to manage the marketing process
- 6 Assess concepts and principles related to the legal, ethical, and regulatory issues in marketing
- 7 Evaluate economic issues related to marketing
- 8 Facilitate the use of technology in the ever-evolving marketing landscape
- 9 Evaluate the user experience and consumer behavior concepts and principles
- 10 Compare marketing concepts of the domestic and international environments
- 11 Apply the marketing research process

Courses & Objectives

MT150 Principles of Marketing/5

- 1 Demonstrate knowledge of marketing concepts such as consumer satisfaction and relationship management
- 2 Design a marketing plan using all elements of the marketing mix (product, price, place, promotion)

- 3 Discuss case scenarios reflecting a variety of issues related to social responsibility in marketing
- 4 Employ a marketing strategy using segmenting, targeting, and positioning

MT160 Professional Selling/3

- 1 Describe customer value and the salesperson's role
- 2 Examine the evolution and alternative approaches to personal selling
- 3 Explain effective selling skills
- 4 Identify personal selling and how people buy

MT226 Retailing/3

- 1 Apply key concepts related to retail management strategies
- 2 Compare merchandise planning and pricing strategies
- 3 Design a plan (incorporating basic retail strategies) on how to gather information about a desired consumer target market
- 4 Utilize strategies to build brand awareness with target audiences

MT233 Graphic Design for Marketing/3

- 1 Understanding of graphic design tools and techniques
- 2 Familiar with layout and design industry protocols
- 3 Knowledge taking a project from concept to distribution
- 4 Apply knowledge learned to marketing applications
- 5 Functional with Adobe Photoshop and InDesign
- 6 Awareness to the creative process

MT234 Website Management for Marketing/3

- 1 Identify various components of an effective website.
- 2 Explain the positives and negatives of creating websites on different platforms.
- 3 Demonstrate how to edit websites for clients.
- 4 Analyze the process of managing a website to effectively represent the plans and campaigns for an organization or client.

MT246 Integrated Branded Promotions/5

- 1 Adapt use of various media
- 2 Analyze ethical and regulatory issues
- 3 Create effective messaging
- 4 Plan and assess campaigns

MT256 Social Media/3

- 1 Develop students' expertise in navigating and utilizing diverse social media platforms such as Facebook, Instagram, Twitter, and LinkedIn, enabling them to craft and optimize tailored marketing campaigns for each.
- 2 Equip students with the ability to conceptualize, plan, and execute impactful influencer marketing strategies on social media, including identifying suitable influencers, negotiating partnerships, and measuring the outcomes on brand awareness and engagement.
- 3 Enable students to create compelling and shareable content through blogging and vlogging, teaching them the art of optimizing content for various platforms and understanding the role of storytelling and visuals in enhancing brand messaging and customer engagement.
- 4 Provide students with insights into the strategic use of social media for business-to-consumer interactions, encompassing social selling techniques, analytics-driven customer profiling, and relationship-building skills to integrate social media effectively into a company's broader marketing and sales strategy.

MT306 Advanced Professional Selling/3

- 1 Analyze and customize a sales presentation based on a customer's needs
- 2 Apply sales process to a variety of sales scenarios
- 3 Formulate a plan for follow-up and building long-term
- 4 Describe customer value and the salesperson's role
- 5 Examine the evolution and alternative approaches to personal selling

MT318 Consumer Trends/3

- 1 Analyze the trends in consumer behavior and apply to a product or service
- 2 Assess how groups influence consumer behavior and apply to marketing strategies
- 3 Differentiate consumer attitudes and behaviors and their use in the decision making process
- 4 Evaluate the concept of consumer satisfaction
- 5 Examine how consumers use heuristics in information processing

MT321 International Marketing/3

- 1 Analyze infrastructure issues
- 2 Distinguish diversity

- 3 Examine legal differences
- 4 Incorporate cultural differences into an international marketing strategy

MT353 Services Marketing/3

- 1 Apply the four Ps of marketing to services
- 2 Differentiate services, consumers, and markets
- 3 Evaluate the importance of managing the customer interface

MT358 Digital Analytics/3

- 1 Digital Marketing Analytics: Understand digital marketing analytics and how to apply it to your marketing career.
- 2 Digital Consumer: Understand how the scale of collected consumer data and the emergence of consumer privacy protections affect marketing in the digital age.
- 3 Digital Company: Recognize a business's current level of analytics maturity and plan how to enhance that analytics maturity.
- 4 Measurement Model: Understand business measurement models and how to establish them to enhance digital marketing analytics effectiveness.
- 5 Data-driven Decisions: Know the advantages of data-driven decision-making and be able to apply the decision-making framework — question, curate, analyze, and optimize.
- 6 Analyze: Determine the analysis approaches and techniques that best support various business questions.
- 7 Optimize: Understand that insights are only impactful when implemented and know how to prioritize persuasive recommendations for various audiences.

MT406 Special Topics in Marketing/3

- 1 Assess the consumer decision making process
- 2 Assess the decision making process through the supply chains
- 3 Evaluate consumer information processing
- 4 Evaluate the information processing necessary through the supply network
- 5 Identify factors influencing a current supply chain
- 6 Research factors influencing consumer behavior

MT415 Marketing Research/5

- 1 Analyze data
- 2 Collect data
- 3 Confirm the elements of the strategic marketing process
- 4 Develop a research proposal
- 5 Develop a survey

- 6 Formulate the implications from research
- 7 Validate strategies to build brand awareness with target audiences

MT424 Marketing Management/5

- 1 Evaluate the effectiveness of a marketing plan
- 2 Incorporate the elements of the strategic marketing process
- 3 Isolate strategies to build brand awareness with target

Technical and Basic Electives:

MT335 Marketing Internship/3

- 1 Evaluate professional experience in the field of marketing
- 2 Analyze careers in the field of marketing
- 3 Exhibit self-confidence and interpersonal skills

Master of Business Administration

Program Goals

- 1 Define, analyze, and solve problems within business disciplines (business knowledge and critical thinking)
- 2 Develop and deliver innovative professional communications (business communication and innovation)
- 3 Demonstrate leadership and collaboration skills to effectively work with others within an organization (teamwork and leadership)
- 4 Analyze social and ethical practices in business disciplines (ethics)

Courses & Objectives

MBA500 Introduction to Graduate Studies/4

- 1 Evaluate and develop strategies to manage roles and graduate school expectations.
- 2 Compose documents using proper APA citation formatting
- 3 Create a formal written project using primary and secondary research
- 4 Communicate on a professional level using both verbal and written skills
- 5 Generate components of SWOT and business case analysis
- 6 Work in individual and team settings to assess problems in the workplace and propose solutions.
- 7 Employ critical thinking, taxonomy, and presentation fundamentals

MBA560 Legal & Ethical Environment of Business/4

- 1 Analyze case studies on ethical theories
- 2 Evaluate various scenarios and case law according to employment laws and employees' rights with rights of businesses in the context of the
- 3

MBA570 Accounting for Managers/4

- 1 based on the results and how they are different from traditional methods of
- 2 Compare the relevancy of costs in relation to business decisions
- 3 Differentiate between classifications of costs
- 4 externally along with how cost behavior can be used to explain budget
- 5 favorable for one department may lead to unfavorable consequences for

MBA575 Organizational Behavior for Managers/4

- 1 organization design, organizational culture, and change management
- 2 motivations, and stressors on the organization
- 3 conflict negotiation affect organizational success

MBA580 Global Business Issues & Strategies/4

- 1 Analyze elements of cultural diversity and its impact on global business
- 2 strategy in a global setting
- 3 Investigate major themes in international business

MBA585 Finance for Managers/4

- 1 Analyze working capital management
- 2 Appraise capital budgeting
- 3 Assess the goals, functions, and measurement of financial management
- 4 Evaluate long-term financing and the financial environment
- 5 Examine the optimal capital structure

MBA605 Graduate Marketing Management/4

- 1 Analyze the marketing process
- 2 internal and external environments in order to make better decisions
- 3 should/does affect the other
- 4 may/does affect the marketing process for an organization

MBA610 Human Resource Management/4

- 1 Assess the steps in the recruitment and selection process
- 2 Compare employers' traditional and career planning-oriented HR focuses
- 3 Evaluate factors that determine ethical behavior at work
- 4 Evaluate fair disciplinary practices
- 5 Assess the HR challenges of international business

MBA640 Quantitative Analysis for Management/4

- 1 situations

- 2 organizational situations
- 3 Evaluate solutions to real-world problems with computer software

MBA655 Executive Leadership/4

- 1 Appraise one's own leadership style
- 2 Compare common leadership styles

MBA680 Managerial Economics/4

- 1 excess capacity, resource scarcity, and opportunity cost
- 2 strategies and performance
- 3 Apply microeconomic principles to pricing and profit-making decisions
- 4 with organizational needs
- 5 Employ rational decision-making methods under conditions of uncertainty

MBA690 Management Capstone/4

- 1 Analyze organizational strategy
- 2 Apply all key concepts of the MBA program
- 3 Evaluate strategic policy

Health Information Technology AAB

Program Goals

- 1 Demonstrate mastery of contemporary health information systems and technologies, applying advanced digital tools and critical thinking strategies for effective data management, analysis, and collaborative decision support in healthcare settings
- 2 Implement and manage comprehensive data governance strategies, utilizing professional communication and leadership skills to ensure security, privacy, and compliance with current healthcare regulations while maintaining ethical standards in data handling
- 3 Execute advanced data analytics using current industry tools and critical analysis to support quality improvement, drive innovative solutions, and promote evidence-based decision making in healthcare operations
- 4 Apply current clinical terminologies and coding systems through detailed problem-solving and attention to accuracy, collaborating effectively with healthcare teams to support accurate documentation and optimal revenue cycle management
- 5 Design and implement efficient workflows that integrate health information systems, demonstrating adaptability and interpersonal skills while ensuring data integrity and promoting interoperability across healthcare platforms
- 6 Utilize emerging technologies and informatics principles, employing creative problem-solving and analytical thinking to improve healthcare delivery, patient outcomes, and organizational performance through data-driven insights
- 7 Demonstrate professional competency in healthcare revenue cycle management, applying effective communication and relationship-building skills while managing financial analytics, reimbursement methodologies, and compliance strategies
- 8 Develop and maintain quality assurance programs through collaborative leadership and strategic thinking to monitor, report, and improve healthcare documentation and data integrity according to current industry standards

Courses & Objectives

HC110 Introduction to Health Professions/3

- 1 Navigate the culture of academics and University life
- 2 Navigate the learning experience and academic programs
- 3 Identify personal protective equipment (PPE) for all body fluids, secretions and excretions, blood, non-intact skin, and mucous membranes
- 4 Identify the following as practiced within an ambulatory care setting: medical asepsis
- 5 Identify the principles of standard precautions
- 6 Identify the infection cycle including the infectious agent, reservoir, susceptible host, means of transmission, portals of entry, and portals of exit

- 7 Use of medical terminology correctly and pronounced accurately to communicate information to providers

HC203 Coding I/5

- 1 Differentiate between the major medical coding classification systems (ICD-10-CM, CPT, and HCPCS) and explain their specific purposes in healthcare reimbursement
- 2 Accurately locate and assign basic diagnostic codes using ICD-10-CM classification, with emphasis on the system's organizational structure and coding conventions
- 3 Demonstrate proper application of CPT coding guidelines to identify and assign appropriate procedure codes for common outpatient services and medical procedures
- 4 Validate code selections using coding resources including coding manuals, guidelines, and documentation requirements to ensure compliance and optimal reimbursement

HC209 Coding II/5

- 1 Assign ICD-10-CM and ICD-10-PCS codes with correct sequencing, POA indicators, and accuracy for inpatient encounters
- 2 Assess the impact of coding on DRGs and APCs, identifying opportunities to improve documentation for accurate grouping
- 3 Create effective, compliant physician queries to clarify ambiguities and address documentation gaps
- 4 Analyze coding quality reports to identify trends, improve documentation, and enhance CMI and compliance
- 5 Accurately assign ICD-10-PCS procedure codes for complex inpatient surgeries, including multiple procedures and approaches

HC217 Coding III/5

- 1 Apply advanced CPT guidelines to code procedures, E/M services, surgeries, and diagnostics, using modifiers appropriately
- 2 Review medical documentation to extract procedural details and assign accurate codes across various specialties
- 3 Assign CPT and HCPCS Level II codes for supplies, equipment, and services, ensuring proper sequencing and documentation
- 4 Interpret NCCI edits to identify bundled services, resolve conflicts, and use modifiers appropriately
- 5 Apply coding rules for different settings and methodologies to ensure accurate reimbursement and regulatory compliance

HIT122 Introduction to Health Information Technology/5

- 1 Assess how social, economic, environmental, and behavioral factors influence individual and population health outcomes
- 2 Examine the structure and functions of healthcare systems and their roles in addressing population health needs

- 3 Compare the roles and interactions of healthcare professionals to support optimal patient care delivery
- 4 Demonstrate how health IT systems capture and use social determinants of health data for decision-making and quality improvement
- 5 Analyze how health IT supports efforts to reduce disparities, improve access, and enhance outcomes across populations

HIT132 Introduction to Healthcare Data Analytics/3

- 1 Identify and evaluate healthcare data sources
- 2 Apply basic statistical analysis techniques to healthcare data
- 3 Create basic data visualizations for healthcare stakeholders
- 4 Utilize healthcare analytics software tools
- 5 Analyze the impact of data analytics on healthcare outcomes

HIT145 Health Information Systems/5

- 1 Manage data dictionaries, templates, and flowsheets to ensure standardized data collection for clinical and regulatory needs
- 2 Design efficient, workflow-aligned data collection tools that maintain data integrity and meet diverse clinical requirements
- 3 Retrieve and organize healthcare data using query tools and analytical software for reporting purposes
- 4 Apply data validation techniques to ensure the accuracy and completeness of healthcare data and identify
- 5 Analyze and optimize data collection workflows to reduce inefficiencies and enhance accuracy
- 6 Track data quality metrics, generate reports, and resolve discrepancies to maintain data integrity
- 7 Assess data collection methods using user feedback and quality indicators to recommend and implement

HIT160 Legal & Ethical Aspects of HIT/5

- 1 Identify and implement strategies to manage potential conflicts of interest in healthcare settings
- 2 Analyze the relationship between legislation, regulations, and healthcare policies
- 3 Evaluate appropriate access levels for healthcare professionals based on their roles and responsibilities
- 4 Apply analytical techniques to identify patterns and trends indicative of potential fraud or abuse
- 5 Develop strategies to maintain high standards of clinical documentation accuracy and completeness
- 6 Apply appropriate reference standards in professional healthcare documentation

HIT225 HIT Revenue Cycle Management/5

- 1 Define and explain the complete revenue lifecycle from initial patient contact through final payment
- 2 Execute proper billing procedures according to different payor requirements
- 3 Generate accurate and compliant patient cost estimates following established protocols
- 4 Identify and resolve payment variances and underpayments

- 5 Analyze trends in denials and underpayments to implement preventive measures
- 6 Develop strategies to improve revenue cycle efficiency and accuracy

HIT235 Healthcare Statistics & Quality Assessment/5

- 1 Demonstrate mastery of statistical terminology and concepts
- 2 Perform statistical analyses using spreadsheets and specialized software
- 3 Create effective visual displays using various data analytic tools
- 4 Analyze quality reports to identify trends and improvement opportunities
- 5 Execute proper reporting procedures for notifiable diseases, abuse, and deaths
- 6 Apply appropriate technological solutions to healthcare data challenges

HIT245 Electronic Healthcare Records/5

- 1 Identify key health record components across healthcare settings and explain their roles in patient care and operations
- 2 Manage health records through their life cycle, including creation, maintenance, storage, and archiving
- 3 Accurately manage EHR data, ensuring compliance with integrity and standardization practices
- 4 Optimize EHR workflows by addressing bottlenecks and aligning with organizational and regulatory needs
- 5 Develop strategies for implementing, maintaining, and decommissioning health information systems
- 6 Audit health records for legal, regulatory, and accreditation compliance and compile reports to ensure standards adherence
- 7 Accurately document patient encounters, including coding and charge entry, to support billing and reporting

HIT266 Management of Health Information Systems/5

- 1 Demonstrate the ability to support patients in navigating the healthcare system by providing guidance on reimbursement processes, accessing services, and understanding available health resources
- 2 Advocate for health information management services and resources that improve patient outcomes, support organizational goals, and address population health needs
- 3 Educate individuals on the scope, roles, and responsibilities of health information management professionals, and mentor colleagues to foster competence and professional growth in the field
- 4 Analyze financial challenges within healthcare systems and apply principles of cost-effectiveness and cost-benefit analysis to prioritize budgetary decisions and promote good financial stewardship
- 5 Practice ethical and transparent communication in interactions with internal and external stakeholders, promoting trust, collaboration, and shared decision-making
- 6 Create and deliver training materials tailored to diverse individuals, groups, and populations, ensuring comprehension and effective application of health information management principles

- 7 Recognize the roles and scope of the inter-professional healthcare team, apply conflict resolution practices, and lead efforts to analyze problems, propose solutions, and encourage collaborative decision-making
- 8 Apply advanced communication and time management skills to foster effective virtual interactions while ensuring the privacy, confidentiality, and security of health information communications

HIT293 Health Information Practicum/3

- 1 Demonstrate mastery of contemporary health information systems and technologies, applying advanced digital tools and critical thinking strategies for effective data management, analysis, and collaborative decision support in healthcare settings
- 2 Implement and manage comprehensive data governance strategies, utilizing professional communication and leadership skills to ensure security, privacy, and compliance with current healthcare regulations while maintaining ethical standards in data handling
- 3 Execute advanced data analytics using current industry tools and critical analysis to support quality improvement, drive innovative solutions, and promote evidence-based decision making in healthcare operations
- 4 Apply current clinical terminologies and coding systems through detailed problem-solving and attention to accuracy, collaborating effectively with healthcare teams to support accurate documentation and optimal revenue cycle management
- 5 Design and implement efficient workflows that integrate health information systems, demonstrating adaptability and interpersonal skills while ensuring data integrity and promoting interoperability across healthcare platforms
- 6 Utilize emerging technologies and informatics principles, employing creative problem-solving and analytical thinking to improve healthcare delivery, patient outcomes, and organizational performance through data-driven insights
- 7 Demonstrate professional competency in healthcare revenue cycle management, applying effective communication and relationship-building skills while managing financial analytics, reimbursement methodologies, and compliance strategies
- 8 Develop and maintain quality assurance programs through collaborative leadership and strategic thinking to monitor, report, and improve healthcare documentation and data integrity according to current industry standards

IT260 IT Risk Management/3

- 1 Explain foundational concepts of IT risk management, including risk types, threat vectors, and the risk management lifecycle.
- 2 Apply industry-standard frameworks to assess and manage IT risks.
- 3 Conduct risk assessment using qualitative and quantitative methodologies to identify and prioritize risks.
- 4 Develop and evaluate mitigation strategies to reduce risk exposure across different IT domains.
- 5 Communicate risk findings and recommendation effectively to both technical and non-technical stakeholders

SC134 Human Anatomy, Pathophysiology, & Terminology I/3

- 1 I.C.1. Identify structural organization of the human body
- 2 I.C.2. Identify body systems
- 3 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 4 I.C.4. Identify major organs in each body system
- 5 I.C.5. Identify the anatomical location of major organs in each body system
- 6 I.C.7. Identify the normal function of each body system
- 7 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology, d.
- 8 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 9 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC142 Human Anatomy, Pathophysiology, & Terminology II/3

- 1 I.C.2. Identify body systems
- 2 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 3 I.C.4. Identify major organs in each body system
- 4 I.C.5. Identify the anatomical location of major organs in each body system
- 5 I.C.7. Identify the normal function of each body system
- 6 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology, d. diagnostic measures, e. treatment modalities
- 7 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 8 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC145 Human Anatomy, Pathophysiology, & Terminology III/3

- 1 I.C.2. Identify body systems
- 2 I.C.4. Identify major organs in each body system
- 3 I.C.5. Identify the anatomical location of major organs in each body system
- 4 I.C.7. Identify the normal function of each body system

- 5 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology d. Diagnostic measures e. Treatment measures
- 6 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 7 V.C.8 Identify the following related to body systems: a. Medical terms b. Abbreviations

SC250 Human Anatomy, Pathophysiology, & Terminology IV/3

- 1 I.C.2 Identify Body Systems
- 2 I.C.4 Identify major organs in each body system
- 3 I.C.5 Identify the anatomical location of major organs in each body system.
- 4 I.C.6 identify the structure and function of the human body across the life span
- 5 I.C.7 Identify the normal function of each body system
- 6 I.C.8 Identify common pathology related to each body system: a. Signs b. Symptoms c. Etiology d. Diagnostic measures e. Treatment modalities
- 7 I.C.9 identify clinical laboratory improvement amendments waived tests associated with common diseases.
- 8 V.C.8 Identify the following related to body systems: a. Medical terms b. Abbreviations

Healthcare Administration BS

Program Goals

- 1 Address public policy in medical care delivery, specifically issues related to public health and epidemiology. (PH, Law)
- 2 Address technological advancements such as health information technology and electronic medical records, trends in this area, and rulings and laws regulating their use. (IT, Quality)
- 3 Analyze and explain ethical arguments related to morality, preservation of life, advance directives, research and experimentation. (Law, Public Health)
- 4 Analyze healthcare financial statements for clarity and appropriateness. (Finance)
- 5 Apply business principles to the healthcare environment.
- 6 Appraise legal and ethical issues related to healthcare.
- 7 Compare and contrast the U.S. healthcare system with those of other countries. (Management, Economics,
- 8 Evaluate issues related to patient consent, rights, and responsibility, as well as corporate responsibility and professional liability. (Law, Public Health)
- 9 Evaluate quality metrics and their use in the accreditation and healthcare delivery process. (Quality, Management)
- 10 Examine historical and current issues related to the delivery and access of healthcare services. (Management, Economics)

- 11 Identify and explain the various providers of healthcare in addition to the means through which healthcare is funded in the U.S. (Management, Economics, Finance)
- 12 Utilize economic principles to explain the demand for healthcare services versus the supply of healthcare services in the U.S. (Economics)

Courses & Objectives

HC305 Healthcare Management/5

- 1 Compare the US healthcare system with those of other countries
- 2 Analyze historical and current issues related to the delivery and
- 3 US
- 4 Evaluate the various providers of healthcare

HC310 Healthcare Law/3

- 1 Evaluate the US legal system including sources of law and government organization
- 2 Differentiate tort law, criminal issues, contracts, civil procedure, and trial practice
- 3 Assess legal and ethical dilemmas that caregivers face
- 4 Summarize patient rights and responsibilities, patient consent, reporting standards, employment law, and legal issues related to the insurance industry

HC315 Quality Metrics in Healthcare/3

- 1 Analyze quality management
- 2 Analyze patient safety measures
- 3 Evaluate the pay for performance, HCAHPS, and patient satisfaction, including patient safety
- 4 Justify the accreditation process

HC325 Public Health & Epidemiology/3

- 1 Analyze "public health" through the lens of science, government, and prevention of disease
- 2 Evaluate social, behavioral, and environmental issues related to public health and the
- 3 Support the science of epidemiology and the role of research in preventing disease

HC415 Health Information Technology/5

- 1 Explain health database management systems
- 2 Defend healthcare privacy laws, confidentiality, and ethical standards
- 3 Summarize information systems and electronic medical records

HC467 Healthcare Finance & Accounting/5

- 1 Analyze financial statement information and reports

- 2 Calculate ratios and analysis tools
- 3 Prepare budgets that align with identified needs
- 4 Assess cost classifications used in the healthcare field

HC472 Healthcare Economics/5

- 1 Appraise basic economic concepts and how they relate to the healthcare setting
- 2 Support the different views of demand-side and supply-side economics as they relate to healthcare

HC490 Healthcare Capstone/3

- 1 Program Goals

Medical Assistant Technology AAB

Program Goals

- 1 Apply protective practices to demonstrate competency in the cognitive, psychomotor, and affective domains.
- 2 Demonstrate competency in administrative functions of medical assisting in the cognitive, psychomotor, and affective domains.
- 3 Demonstrate competency in third party reimbursement concepts using cognitive, psychomotor, and affective domains.
- 4 Demonstrate competency in the cognitive, psychomotor, and affective domains regarding pharmacology and the anatomy and physiology of the human body.
- 5 Develop competency in the cognitive, psychomotor, and affective domains regarding basic practice finances.
- 6 Employ competency in the cognitive, psychomotor, and affective domains in regards to applied mathematics.
- 7 Exhibit competency in the cognitive, psychomotor, and affective domains regarding applied infection control principles.
- 8 Utilize cognitive, psychomotor, and affective domains to employ the concepts of effective communication.
- 9 Validate competency in the cognitive, psychomotor, and affective domains regarding the ethical considerations of medical assisting.
- 10 Verify competency in the cognitive, psychomotor, and affective domains regarding the legal concepts of medical assisting.
- 11 Apply cognitive, psychomotor, and affective skills to promote patient nutrition.
- 12 Illustrate competency in procedural and diagnostic coding in the cognitive and psychomotor domains.
- 13 Practice soft skills: critical thinking, reassure patients, demonstrate empathy, listening, respect diversity, personal boundaries, and self-awareness.

Courses & Objectives

MO133 Administrative Skills for the Medical Assistant/3

- 1 V.C.1. Identify types of verbal and nonverbal communication
- 2 V.C.2. Identify communication barriers
- 3 V.C.3. Identify techniques of overcoming communication barriers
- 4 V.C.4. Identify the steps in the sender receiver process
- 5 V.C.5. Identify challenges in communication with different age groups
- 6 V.C.6 Identify techniques for coaching a patient related to specific needs
- 7 V.C.7. Identify different types of electronic technology used in professional communication
- 8 V.C.9. Identify the principles of self-boundaries
- 9 V.C.10. identify the role of the medical assistant as a patient navigator
- 10 V.C.11 Identify coping mechanisms
- 11 V.C.12 identify subjective and Objective information
- 12 V.C. 13. Identify the basic concepts of the following theories of : a. Maslow b. Erikson c. Kubler-Ross
- 13 V.C.14. identify issues associated with diversity as it relates to patient care
- 14 V.C. 15 Identify the medical assistant's role in telehealth
- 15 VII.C.1 Define the following bookkeeping terms: a. Charges b. Payments c. Accounts receivable d. Accounts payable e. Adjustments f. End of day reconciliation
- 16 VII. C. 2 Identify precautions for accepting the following types of payments: a. Cash b. Check c. Credit card d. Debit card
- 17 VII.C. 3 Identify types of adjustments made to patient accounts including: a. Non sufficient funds check b. Collections agency transaction c. Credit balance d. Third party
- 18 VII.C. 4 Identify patient financial obligations for services rendered
- 19 VI.C.1 Identify different types of appointment scheduling methods
- 20 VI.C.2 Identify critical information required for scheduling patient procedures
- 21 VI.C. 3 Recognize the purpose for routine maintenance of equipment
- 22 VI.C. 4 Identify steps involved in completing an inventory
- 23 VI.C. 5 Identify the importance of data back-up
- 24 VI.C. 6 identify the components of and electronic medical Record, Electronic Health Record, and Practice Management System.
- 25 V.P.3 Coach patients regarding: a. Office policies b. Medical encounters
- 26 V.P.4 Demonstrate professional telephone techniques

- 27 V.P.5 Document telephone messages accurately
- 28 V.P.1 Respond to nonverbal communication
- 29 A.4 Demonstrate active listening skills
- 30 A.5 Respect diversity
- 31 A.6 Recognize personal boundaries
- 32 A. 8 demonstrate self awareness
- 33 VI.P. 4 Perform an inventory of supplies

MO139 Basic Pharmacology/3

- 1 II.C.1. Define basic units of measurement in: a. metric system, b. household system
- 2 II.C.2. Identify abbreviations used in calculating medication dosages
- 3 II.P.1. Calculate proper dosages of medication for administration
- 4 II.P.4. Apply mathematical computations to solve equations
- 5 II.P.5. Convert among measurement systems
- 6 A.1 Demonstrate critical thinking skills
- 7 A.3 Demonstrate empathy for patient concerns

MO152 Medical Accounting Software/3

- 1 V.P.6 Using technology, compose clear and correct correspondence
- 2 V.P.7 Use a list of community resources to facilitate referrals
- 3 V.P.8 Participate in a telehealth interaction with a patient
- 4 VI.P.1 Manage appointment schedule, using established priorities
- 5 VI.P.2 Schedule a patient procedure
- 6 VI.P. 3 Input patient data using an electronic system
- 7 VII.P.1 Perform accounts receivable procedures to patients accounts including posting: a. Charges b. Payments
c. Adjustments
- 9 VII.P. 2 Input accurate billing information in an electronic system
- 10 VII.P. 3 Inform a patient of financial obligations for services rendered
- 11 VIII.P. 1 Interpret information on an insurance card
- 12 VIII.P. 2 Verify eligibility for services
- 13 VIII.P. 3 Obtain precertification or preauthorization with documentation
- 14 VIII.P. 4 Complete an insurance claim form
- 15 VIII.P.5 Assist a patient in understanding an Explanation of Benefits (EOB)
- 16 A.1 Demonstrate critical thinking skills

- 17 A.3 Demonstrate empathy for patient concerns
- 18 A.4 Demonstrate active listening skills
- 19 A.7 Demonstrate tactfulness

MO156 Clinical I/5

- 1 I.P.1. Accurately measure and record: a. blood pressure, b. temperature, c. pulse, d. respirations, e. height, f. weight (adult and infant), g. length (infant), h. head circumference (infant), i. oxygen saturation
- 2 I.P.3. Perform patient screening using established protocols
- 3 I.P.8. Instruct and prepare a patient for a procedure or a treatment
- 4 I.P.9. Assist provider with a patient exam
- 5 II.P.3. Document on a growth chart
- 6 II.P.5. Convert among measurement systems
- 7 III.P.2. Select appropriate barrier/personal protective equipment (PPE)
- 8 III.P.3. Perform handwashing
- 9 III.P.4. Prepare items for autoclaving
- 10 III.P.5. Perform sterilization procedures
- 11 III.P.6. Prepare a sterile field
- 12 III.P.7. Perform within a sterile field
- 13 III.P.8. Perform wound care
- 14 III.P.9. Perform dressing change
- 15 III.P.10 Demonstrate proper disposal of biohazardous material: a. sharps, b. regulated wastes
- 16 V.P.1. Respond to nonverbal communication
- 17 V.P.2. Correctly use and pronounce medical terminology in healthcare interactions
- 18 X.P.3. Document patient care accurately in the medical record
- 19 XII.P.1. Comply with safety practices
- 20 XII.P.3. Use proper body mechanics
- 21 II.C.3. Identify normal and abnormal results as reported in: a. graphs, b. tables
- 22 III.C.1. Identify major types of infectious agents
- 23 III.C.2. Identify the infection cycle including: a. the infectious agent, b. reservoir, c. susceptible host, d. means of transmission, e. portals of entry, f. portals of exit
- 24 III.C.3. Identify the following as practiced within an ambulatory care setting: a. medical asepsis, b. surgical asepsis
- 25 III.C.4. Identify methods of controlling the growth of micro-organisms

- 26 III.C.5. Identify the principles of standard precautions
- 27 III.C.6. Identify personal protective equipment (PPE)
- 28 V.C.1. Identify types of verbal and nonverbal communication
- 29 V.C.2. Identify communication barriers
- 30 V.C.3. Identify techniques of overcoming communication barriers
- 31 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations
- 32 V.C.12. Identify subjective and objective information
- 33 XII.C.7. Identify principles of: a. body mechanics, b. ergonomics
- 34 A.1 Demonstrate critical thinking skills
- 35 A.2. Reassure patients
- 36 A.3. Demonstrate empathy for patient concerns
- 37 A.6. Recognize personal boundaries
- 38 A.7. Demonstrate tactfulness
- 39 A.8. Demonstrate self-awareness

MO157 Understanding Health Insurance/3

- 1 VIII.C.1. Identify: a. types of third party plans, b. steps for filing a third party claim
- 2 VIII.C.2. Identify managed care requirements for patient referral
- 3 VIII.C.3. Identify processes for: a. verification of eligibility for services, b. precertification/preauthorization, c. tracking unpaid claims, d. claim denials and appeals
- 4 VIII.C.4. Identify fraud and abuse as they relate to a third-party reimbursement
- 5 VIII.C.5. Define the following: a. bundling and unbundling of codes, b. advanced beneficiary notice (ABN), c. allowed amount, d. deductible, e. co-insurance, f. copay
- 6 VIII.C.6. Identify the purpose and components of the Explanation of Benefits (EOB) and Remittance Advice (RA) Statements

MO230 Medical Law & Ethics/3

- 1 X.C.1 Identify Scope of practice and standards of care for medical assistants
- 2 X.C.2 Identify the provider role in terms of standard of care
- 3 X.C. 3 Identify components of the Health Insurance Portability and Accountability Act (HIPPA)
- 4 X.C.4 Identify the standards of the Patient Care Partnership
- 5 X.C. 5 Identify the licensure and certification as they apply to healthcare providers
- 6 X.C.6 Identify criminal and civil law as they apply to the practicing medical assistant

- 7 X.C. 7 Define: a. Negligence b. Malpractice c. Statute of Limitations d. Good Samaritan Acts e. Uniform Anatomical Gift Act f. Living will/advance directives g. Medical durable power of attorney h. Patient Self Determination Act i. Risk management
- 8 X.C. 8 Identify the purpose of medical malpractice insurance
- 9 X.C. 9 Identify legal and illegal applicant interview questions
- 10 X.C. 10 Identify: A. Health Information Technology for Economic and Clinical Health Act b. Genetic Information Nondiscrimination Act of 2008 c. Americans with disabilities Act Amendments
- 11 X. C. 11 Identify the process in compliance reporting: a. Unsafe activities b. Errors in patient care c. Conflicts of interest d. Incident reports
- 12 X.C.12 Identify compliance with public health statutes: a. Communicable diseases b. Abuse, neglect, exploitation c. Wounds of violence
- 13 X.C.13 Define the following medical legal terms: a. Informed consent b. Implied consent c. Expressed consent d. Patient incompetence e. Emancipated minor f. Mature minor g. Subpoena duces tecum h. Respondeat superior i. Res ipsa loquitur j. locums tenens k. defendant-plaintiff l. deposition m. arbitration-mediation
- 14 XI.C.1 Define: a. Ethics b. Morals
- 15 XI.C. 2 Identify personal and professional ethics
- 16 XI.C. 3 Identify potential effects of personal morals on professional performance
- 17 X.1.C 4 Identify professional behaviors of medical assistants
- 18 X.P.1 Locate a state legal scope of practice for medical assistants
- 19 X.P.2 Apply HIPAA rules in regard to: a. Privacy b. Release of information
- 20 X.P.4 Complete compliance reporting based on public health statutes
- 21 X.P. 5 Report an illegal activity following the protocol established by the healthcare setting
- 22 X.P.6 Complete an incident report related to an error in patient care
- 23 XI.P.1 Demonstrate professional responses to ethical issues
- 24 A.1 Demonstrate critical thinking skills
- 25 A.4 Demonstrate active listening
- 26 A.5 Respect diversity

MO235 Clinical II/5

- 1 I.P.2 Perform the following procedures: a. Electrocardiography b. Venipuncture c. Capillary puncture d. Pulmonary function test
- 3 I.P.3 Perform patient screening following established protocols
- 4 I.P.4 Verify the rules of medication administration a. Right patient b. Right medication c. Right dose d. Right route e. Right time f. Right documentation

- 5 I.P.5 Select proper sites for administering parenteral medication
- 6 I.P.6 Administer oral medications
- 7 I.P.7 Administer parenteral (excluding IV) medications
- 8 I.P.8 instruct and prepare a patient for a procedure
- 9 I.P.10 Perform a quality control measure
- 10 I.P.11 Collect specimens and perform: a. Clia waived hematology test b. Clia waved chemistry test c. Clia waved urinalysis d. Clia waved immunology test e. Clia waived microbiology test
- 11 II.P. 2 Record laboratory test results into the patient's record
- 12 I.C.11 identify quality assurance practices in healthcare
- 13 A.1 Demonstrate critical thinking skills
- 14 A.2. Reassure patients
- 15 A.3 Demonstrate empathy for patient concerns
- 16 A.4 Demonstrate active listening
- 17 A.6 Recognize personal boundaries
- 18 A.7 Demonstrate tactfulness
- 18 A.8 Demonstrate self awareness

MO244 Advanced Pharmacology/5

- 1 I.C.10 Identify the classifications of medications, including: a. Indications for use b. Desired effects c. Side effects d. Adverse reactions
- 2 I.C.11 Identify quality assurance practices in healthcare
- 3 I.C. 13 Identify appropriate vaccinations based on an immunization schedule
- 4 A.1 Demonstrate critical thinking skills
- 5 A.3 Demonstrate empathy for patients concerns

MO258 Healthcare in the Community/3

- 1 I.C.12 Identify basic principles of first aid
- 2 III.C.7. Identify the implications for failure to comply with Center for Disease Control (CDC) regulations in health care settings
- 3 IV.C.1 identify dietary nutrients including: a. Carbohydrates b. Fat c. Protein d. Minerals e. Electrolytes f. Vitamins g. Fiber h. Water
- 4 IV.C.2 Identify the function of dietary supplements
- 5 IV.C.3 Identify the special dietary needs for: a. Weight control b. Diabetes c. Cardiovascular disease d. Hypertension e. Cancer f. Lactose sensitivity g. Gluten free h. Food allergies i. Eating disorders
- 6 IV.C. 4 Identify the components of food label.

- 7 XII.C. 1 Identify workplace safeguards
- 8 XII.C.2 Identify safety techniques that can be used in responding to accidental exposure to: a. Blood b. Other
body fluids c. Needle sticks d. Chemicals
- 9 XII.C.3 Identify fire safety issues in an ambulatory healthcare setting
- 10 XII.C.4 Identify emergency practices for evacuation of a healthcare setting
- 11 XII. C. 5 Identify the purpose of Safety Data Sheets (SDS) in a healthcare setting
- 12 XII.C.6 Identify processes for disposal of a. biohazardous waste b. Chemical
- 13 XII.C.8 identify critical elements of an emergency plan for response to a natural disaster or other emergency
- 14 XII.C. 9 Identify physical manifestations and emotional behaviors on a person involved in a n emergency
- 15 I.P.12 Provide up to date documentation of provider/professional CPR
- 16 I.P.13 Perform first aid procedures: a. Bleeding b. Diabetic coma or insulin shock c. Stroke d. Seizures e.
Environmental emergency f. Syncope
- 17 III.P.1 Participate in bloodborne pathogen training
- 18 IV.P.1 Instruct a patient regarding a dietary change related to a patient's special dietary needs.
- 19 XII.P.2 Demonstrate proper use of: a. Eyewash equipment b. Fire extinguishers
- 20 XII.P.4 Evaluate an environment to Identify unsafe conditions
- 21 A.1 Demonstrate critical thinking skills
- 22 A.7 Demonstrate tactfulness

MO293 Medical Practicum/5

- 1 All Medical Courses have been completed and all Comps have been achieved

HC110 Introduction to Health Professions/3

- 1 Navigate the culture of academics and University life
- 2 Navigate the learning experience and academic programs
- 3 Identify personal protective equipment (PPE) for all body fluids, secretions and excretions, blood, non-
intact skin, and mucous membranes
- 4 Identify the following as practiced within an ambulatory care setting: medical asepsis
- 5 Identify the principles of standard precautions
- 6 Identify the infection cycle including the infectious agent, reservoir, susceptible host, means of
transmission, portals of entry, and portals of exit
- 7 Use of medical terminology correctly and pronounced accurately to communicate information to
providers

HC203 Coding I/5

- 1 IX.C1 Identify the current procedural and diagnostic coding systems, including Healthcare Common Procedure Coding Systems II (HCPCS Level II)
- 2 IX.C.2 Identify effects of: a. Upcoding b. Downcoding
- 3 IX.C.3 Define Medical necessity
- 4 IX.P.1 Perform procedural coding
- 5 IX.P.1 Perform Diagnostic coding
- 6 IX.P.3 Utilize Medical necessity guidelines
- 7 A.1 Demonstrate critical thinking
- 8 A.7 Demonstrate tactfulness

SC134 Human Anatomy, Pathophysiology, & Terminology I/3

- 1 I.C.1. Identify structural organization of the human body
- 2 I.C.2. Identify body systems
- 3 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 4 I.C.4. Identify major organs in each body system
- 5 I.C.5. Identify the anatomical location of major organs in each body system
- 6 I.C.7. Identify the normal function of each body system
- 7 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c.
- 8 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with
- 9 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC142 Human Anatomy, Pathophysiology, & Terminology II/3

- 1 I.C.2. Identify body systems
- 2 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 3 I.C.4. Identify major organs in each body system
- 4 I.C.5. Identify the anatomical location of major organs in each body system
- 5 I.C.7. Identify the normal function of each body system
- 6 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c.
- 7 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with
- 8 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC145 Human Anatomy, Pathophysiology, & Terminology III/3

- 1 I.C.2. Identify body systems
- 2 I.C.4. Identify major organs in each body system
- 3 I.C.5. Identify the anatomical location of major organs in each body system

- 4 I.C.7. Identify the normal function of each body system
- 5 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology d. Diagnostic measures e. Treatment measures
- 6 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 7 V.C.8 Identify the following related to body systems: a. Medical terms b. Abbreviations

SC250 Human Anatomy, Pathophysiology, & Terminology IV/3

- 1 I.C.2 Identify Body Systems
- 2 I.C.4 Identify major organs in each body system
- 3 I.C.5 Identify the anatomical location of major organs in each body system.
- 4 I.C.6 identify the structure and function of the human body across the life span
- 5 I.C.7 Identify the normal function of each body system
- 6 I.C.8 Identify common pathology related to each body system: a. Signs b. Symptoms c. Etiology d. Diagnostic measures e. Treatment modalities
- 7 I.C.9 identify clinical laboratory improvement amendments waived tests associated with common diseases.
- 8 V.C.8 Identify the following related to body systems: a. Medical terms b. Abbreviations

Medical Office Management AAB

Program Goals

- 1 Apply effective oral and written communication skills using proper medical terminology
- 2 Code using the current ICD and CPT systems and manage third-party reimbursement
- 3 Prepare documents within office software applications
- 4 Perform legally and ethically within the medical environment
- 5 Utilize medical software and manage medical records within the medical office

Courses & Objectives

DP117 Database Applications/3

- 1 Create databases, tables, queries, forms, and reports
- 2 Distinguish the purpose and use of databases

DP150 Spreadsheet Applications/3

- 1 Apply appropriate formatting to spreadsheet data

- 2 Apply basic spreadsheet features
- 3 Create spreadsheet formulas and functions that perform basic calculations
- 4 Create spreadsheet formulas using appropriate cell referencing

HC110 Introduction to Health Professions/3

- 1 Navigate the culture of academics and University life
- 2 Navigate the learning experience and academic programs
- 3 Identify personal protective equipment (PPE) for all body fluids, secretions and excretions, blood, non-intact skin,
- 4 Identify the following as practiced within an ambulatory care setting: medical asepsis
- 5 Identify the principles of standard precautions
- 6 Identify the infection cycle including the infectious agent, reservoir, susceptible host, means of transmission, portals of entry, and portals of exit
- 7 Use of medical terminology correctly and pronounced accurately to communicate information to providers

KY146 Keyboarding I/5

- 1 Create properly formatted documents at a beginner level
- 2 Demonstrate speed and accuracy at a beginner level
- 3 Revise documents after proofreading or from proofreader notations at a beginner level

KY147 Keyboarding II/5

- 1 Create properly formatted documents at an intermediate level
- 2 Demonstrate speed and accuracy at an intermediate level
- 3 Revise documents after proofreading or from proofreader notations at an intermediate level

SC134 Human Anatomy, Pathophysiology, & Terminology I/3

- 1 I.C.1. Identify structural organization of the human body
- 2 I.C.2. Identify body systems
- 3 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 4 I.C.4. Identify major organs in each body system
- 5 I.C.5. Identify the anatomical location of major organs in each body system
- 6 I.C.7. Identify the normal function of each body system
- 7 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology, d. diagnostic measures, e. treatment modalities
- 8 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 9 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC142 Human Anatomy, Pathophysiology, & Terminology II/3

- 1 I.C.2. Identify body systems
- 2 I.C.3. Identify: a. body planes, b. directional terms, c. quadrants, d. body cavities
- 3 I.C.4. Identify major organs in each body system
- 4 I.C.5. Identify the anatomical location of major organs in each body system
- 5 I.C.7. Identify the normal function of each body system
- 6 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology, d. diagnostic measures, e. treatment modalities
- 7 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 8 V.C.8. Identify the following related to body systems: a. medical terms, b. abbreviations

SC145 Human Anatomy, Pathophysiology, & Terminology III/3

- 1 I.C.2. Identify body systems
- 2 I.C.4. Identify major organs in each body system
- 3 I.C.5. Identify the anatomical location of major organs in each body system
- 4 I.C.7. Identify the normal function of each body system
- 5 I.C.8. Identify common pathology related to each body system including: a. signs, b. symptoms, c. etiology d. Diagnostic measures e. Treatment measures
- 6 I.C.9. Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases
- 7 V.C.8 Identify the following related to body systems: a. Medical terms b. Abbreviations

SC250 Human Anatomy, Pathophysiology, & Terminology IV/3

- 1 I.C.2 Identify Body Systems
- 2 I.C.4 Identify major organs in each body system
- 3 I.C.5 Identify the anatomical location of major organs in each body system.
- 4 I.C.6 identify the structure and function of the human body across the life span
- 5 I.C.7 Identify the normal function of each body system
- 6 I.C.8 Identify common pathology related to each body system: a. Signs b. Symptoms
- 7 I.C.9 identify clinical laboratory improvement amendments waived tests associated
- 8 V.C.8 Identify the following related to body systems: a. Medical terms b.

MO133 Administrative Skills for the Medical Assistant/3

- 1 V.C.1. Identify types of verbal and nonverbal communication

- 2 V.C.2. Identify communication barriers
- 3 V.C.3. Identify techniques of overcoming communication barriers
- 4 V.C.4. Identify the steps in the sender receiver process
- 5 V.C.5. Identify challenges in communication with different age groups
- 6 V.C.6 Identify techniques for coaching a patient related to specific needs
- 7 V.C.7. Identify different types of electronic technology used in professional communication
- 8 V.C.9. Identify the principles of self-boundaries
- 9 V.C.10. identify the role of the medical assistant as a patient navigator
- 10 V.C.11 Identify coping mechanisms
- 11 V.C.12 identify subjective and Objective information
- 12 V.C. 13. Identify the basic concepts of the following theories of : a. Maslow b. Erikson c. Kubler-Ross
- 13 V.C.14. identify issues associated with diversity as it relates to patient care
- 14 V.C. 15 Identify the medical assistant's role in telehealth
- 15 VII.C.1 Define the following bookkeeping terms: a. Charges b. Payments c. Accounts receivable d. Accounts payable e. Adjustments f. End of day reconciliation
- 16 VII. C. 2 Identify precautions for accepting the following types of payments: a. Cash b. Check c. Credit card d. Debit card
- 17 VII.C. 3 Identify types of adjustments made to patient accounts including: a. Non sufficient funds check b. Collections agency transaction c. Credit balance d. Third party
- 18 VII.C. 4 Identify patient financial obligations for services rendered
- 19 VI.C.1 Identify different types of appointment scheduling methods
- 20 VI.C.2 Identify critical information required for scheduling patient procedures
- 21 VI.C. 3 Recognize the purpose for routine maintenance of equipment
- 22 VI.C. 4 Identify steps involved in completing an inventory
- 23 VI.C. 5 Identify the importance of data back-up
- 24 VI.C. 6 identify the components of and electronic medical Record, Electronic Health Record, and Practice Management System.
- 25 V.P.3 Coach patients regarding: a. Office policies b. Medical encounters
- 26 V.P.4 Demonstrate professional telephone techniques
- 27 V.P.5 Document telephone messages accurately
- 28 V.P.1 Respond to nonverbal communication
- 29 A.4 Demonstrate active listening skills
- 30 A.5 Respect diversity

- 31 A.6 Recognize personal boundaries
- 32 A. 8 demonstrate self awareness
- 33 VI.P. 4 Perform an inventory of supplies

MO152 Medical Accounting Software/3

- 1 V.P.6 Using technology, compose clear and correct correspondence
- 2 V.P.7 Use a list of community resources to facilitate referrals
- 3 V.P.8 Participate in a telehealth interaction with a patient
- 4 VI.P.1 Manage appointment schedule, using established priorities
- 5 VI.P.2 Schedule a patient procedure
- 6 VI.P. 3 Input patient data using an electronic system
- 7 VII.P.1 Perform accounts receivable procedures to patients accounts including posting: a. Charges b. Payments
c. Adjustments
- 9 VII.P. 2 Input accurate billing information in an electronic system
- 10 VII.P. 3 Inform a patient of financial obligations for services rendered
- 11 VIII.P. 1 Interpret information on an insurance card
- 12 VIII.P. 2 Verify eligibility for services
- 13 VIII.P. 3 Obtain precertification or preauthorization with documentation
- 14 VIII.P. 4 Complete an insurance claim form
- 15 VIII.P.5 Assist a patient in understanding an Explanation of Benefits (EOB)
- 16 A.1 Demonstrate critical thinking skills
- 17 A.3 Demonstrate empathy for patient concerns
- 18 A.4 Demonstrate active listening skills
- 19 A.7 Demonstrate tactfulness

MO157 Understanding Health Insurance/3

- 1 VIII.C.1. Identify: a. types of third party plans, b. steps for filing a third party claim
- 2 VIII.C.2. Identify managed care requirements for patient referral
- 3 VIII.C.3. Identify processes for: a. verification of eligibility for services, b. precertification/preauthorization, c. tracking
unpaid claims, d. claim denials and appeals
- 4 VIII.C.4. Identify fraud and abuse as they relate to a third-party reimbursement
- 5 VIII.C.5. Define the following: a. bundling and unbundling of codes, b. advanced beneficiary notice (ABN), c.
allowed amount, d. deductible, e. co-insurance, f. copay

6 VIII.C.6. Identify the purpose and components of the Explanation of Benefits (EOB) and Remittance Advice (RA) Statements

MO230 Medical Law & Ethics/3

- 1 X.C.1 Identify Scope of practice and standards of care for medical assistants
- 2 X.C.2 Identify the provider role in terms of standard of care
- 3 X.C. 3 Identify components of the Health Insurance Portability and Accountability Act (HIPPA)
- 4 X.C.4 Identify the standards of the Patient Care Partnership
- 5 X.C. 5 Identify the licensure and certification as they apply to healthcare providers
- 6 X.C.6 Identify criminal and civil law as they apply to the practicing medical assistant
Anatomical Gift Act f. Living will/advance directives g. Medical durable power of attorney h. Patient Self
7 Determination Act I. Risk management
- 8 X.C. 8 Identify the purpose of medical malpractice insurance
- 9 X.C. 9 Identify legal and illegal applicant interview questions
- 10 X.C. 10 Identify: A. Health Information Technology for Economic and Clinical Health Act b. Genetic Information
Nondiscrimination Act of 2008 c. Americans with disabilities Act Amendments
- 11 X. C. 11 Identify the process in compliance reporting: a. Unsafe activities b. Errors in patient care c. Conflicts of
interest d. Incident reports
- 12 X.C.12 Identify compliance with public health statutes: a. Communicable diseases b. Abuse, neglect, exploitation
c. Wounds of violence
Patient incompetence e. Emancipated minor f. Mature minor g. Subpoena duces tecum h. Respondeat superior
13 i. Res ipsa loquitur j. locums tenens k. defendant-plaintiff l. deposition m. arbitration-mediation
- 14 XI.C.1 Define: a. Ethics b. Morals
- 15 XI.C. 2 Identify personal and professional ethics
- 16 XI.C. 3 Identify potential effects of personal morals on professional performance
- 17 X.1.C 4 Identify professional behaviors of medical assistants
- 18 X.P.1 Locate a state legal scope of practice for medical assistants
- 19 X.P.2 Apply HIPAA rules in regard to: a. Privacy b. Release of information
- 20 X.P.4 Complete compliance reporting based on public health statutes
- 21 X.P. 5 Report an illegal activity following the protocol established by the healthcare setting
- 22 X.P.6 Complete an incident report related to an error in patient care
- 23 XI.P.1 Demonstrate professional responses to ethical issues
- 24 A.1 Demonstrate critical thinking skills

- 25 A.4 Demonstrate active listening
- 26 A.5 Respect diversity

HC203 Coding I/5

- 1 Differentiate between the major medical coding classification systems (ICD-10-CM, CPT, and HCPCS) and explain their specific purposes in healthcare reimbursement
- 2 Accurately locate and assign basic diagnostic codes using ICD-10-CM classification, with emphasis on the system's organizational structure and coding conventions
- 3 Demonstrate proper application of CPT coding guidelines to identify and assign appropriate procedure codes for common outpatient services and medical procedures
- 4 Validate code selections using coding resources including coding manuals, guidelines, and documentation requirements to ensure compliance and optimal reimbursement

HC208 Coding II/5

- 1 Apply the appropriate principles and applications of coding systems (ICD-10-CM, CPT)
- 2 Select diagnostic and procedural groupings in accordance with official guidelines (APC)
- 3 Compare and contrast role of coding in the revenue cycle including case mix analysis and indexes
- 4 Justify coding compliance and revenue strategies, auditing, and reporting
- 5 Prioritize compliance with regulatory requirements including quality monitors and reporting

OP140 Medical Machine Transcription I/5

- 1 Transcribe medical dictated documents
- 2 Apply correct formatting to typed medical documents
- 3 Edit documents to reflect correct grammar, punctuation, capitalization, and spelling
- 4 Proofread and revise medical documents

OP292 Office Technology Capstone/3

- 1 Program Goals

WP138 Introduction to Word Processing Applications/3

- 1 Create basic word processing documents using appropriate document organization and formatting
- 2 Create basic word processing documents with appropriate referencing and collaboration
- 3 Apply basic software functions and file management techniques
- 4 Demonstrate knowledge of basic office fundamentals

Agribusiness Management BS

Program Goals

- 1 Analyze and communicate current and emerging trends within the agricultural industry
- 2 Report on the advancements in technology and innovation shaping the modern agricultural industry
- 3 Apply the skills and operations used in agriculture through hands-on experiences and real-world applications
- 4 Acquire expertise in applying agricultural economics principles for informed decision-making in agribusiness and farm management
- 5 Demonstrate proficiency in applying skills to effectively manage agribusiness enterprises
- 6 Effectively develop business plans by applying facts and qualitative information significant to agribusiness and food industry management
- 7 Develop proficiency in applying finance and accounting practices specifically designed for the agricultural context

Courses & Objectives

AG106 Agribusiness Fundamentals/3

- 1 Distinguish the important characteristics and framework of the agriculture market
- 2 Identify the importance of trends and patterns in agriculture
- 3 Identify the resources, markets, and organizational issues involved in agriculture
- 4 Recognize the various agricultural commodity markets

AG116 Agricultural Technology/3

- 1 Identify the advantages and disadvantages of agricultural technology
- 2 Recognize the technology and innovation used in agriculture

AG140 Agribusiness Marketing and Sales/5

- 1 Explain the fundamental principles of marketing and sales as they relate to the agriculture industry
- 2 Develop and implement marketing strategies tailored to agricultural products and services
- 3 Demonstrate effective sales techniques, including prospecting, relationship-building, and closing sales
- 4 Analyze consumer behavior and market trends in the agricultural sector

AG210 Agronomy I/5

- 1 Analyze soil properties and their influence on crop production.
- 2 Interpret soil test data to recommend appropriate nutrient and fertility management practices.
- 3 Compare the effectiveness of tillage, cover cropping, and other soil conservation strategies.
- 4 Evaluate seed variety selection based on soil conditions and fertility management.
- 5 Apply knowledge of soil science to assess environmental concerns in crop production.

- 6 Relate soil characteristics to yield potential and agronomic decision-making.

AG211 Animal Science/5

- 1 Analyze current trends in animal science, including animal welfare, animal identification, and food safety
- 2 Apply practices to protect the environment in livestock operations
- 3 Demonstrate a basic understanding of the beef, dairy, and swine industries
- 4 Relate the importance of livestock feed mixing
- 5 Use terminology used in the livestock industry

AG212 Agricultural Economics/3

- 1 Explain economic concepts such as supply, demand, elasticity, and marginal analysis within an agricultural context.
- 2 Analyze market behavior and pricing strategies for agricultural goods and services.
- 3 Evaluate the role of government policy and global trade in agricultural economics.
- 4 Apply cost-benefit and breakeven analysis to farm and agribusiness decision-making.
- 5 Use economic reasoning to assess risk, resource use, and financial planning in agribusiness.

AG230 Agronomy II/5

- 1 Describe the structure and function of plant systems and their roles in crop development.
- 2 Chart the growth stages of key agronomic crops, including corn, soybeans, and wheat
- 3 Analyze the effects of environmental variables on plant health and productivity.
- 4 Evaluate the role of genetics and plant breeding in improving crop performance.
- 5 Interpret plant nutrient requirements and develop basic plant health management strategies.

AG235 Sustainable Agriculture/3

- 1 Define sustainability and its role in modern agriculture
- 2 Assess the environmental and economic impact of conventional agricultural practices
- 3 practices
- 4 Analyze the role of government policies and global initiatives in sustainable agriculture
- 5 Understand the long-term implications of sustainability on the agricultural industry's future

AG300 Agribusiness Strategies & Management/5

- 1 Apply the four functions of management to real-world agribusiness scenarios.
- 2 Analyze strategic options using SWOT analysis and other planning tools.
- 3 Evaluate the impact of economic, regulatory, and consumer behavior trends on agribusiness strategies.
- 4 Develop and critique strategic plans for various types of agribusinesses.

AG311 Agricultural Finance/3

- 1 Explain financial principles and their application in agribusiness
- 2 Analyze financial statements and develop budgets for agricultural enterprises
- 3 Evaluate loan and grant options available to agribusinesses

- 4 Apply risk management strategies to protect financial assets in agriculture
- 5 Utilize record-keeping and accounting practices specific to agriculture

AG315 Professional Agribusiness Selling/5

- 1 Evaluate the relationship selling process and its application to long-term customer engagement.
- 2 Demonstrate effective communication and listening skills tailored to agricultural clientele.
- 3 Develop a customer-focused sales plan using a step-by-step approach to the sales process.

AG400 Agricultural Policy/5

- 1 Analyze the political, economic, and social factors that influence agricultural policy formation.
- 2 Evaluate key components and historical developments of U.S. agricultural and food policy.
- 3 Interpret the impact of agricultural policies on producers, consumers, and agribusiness stakeholders.
- 4 management
- 5 Formulate informed positions on policy issues affecting agriculture at local, national, and global levels.

AG405 Agricultural Price Analysis/3

- 1 Examine the fundamentals of price risk
- 2 Evaluate price forecasting
- 3 Investigate futures exchange
- 4 Analyze the fundamentals of hedging

AG491 Agribusiness Practicum/3

- 1 All program goals

Agribusiness Marketing/Management Technology AAB

Program Goals

- 1 Analyze and communicate current and emerging trends within the agricultural industry
- 2 Report on the advancements in technology and innovation shaping the modern agricultural industry
- 3 Apply the skills and operations used in agriculture through hands-on experiences and real-world applications
- 4 Acquire expertise in applying agricultural economics principles for informed decision-making in agribusiness and farm management

Courses & Objectives

AG106 Agribusiness Fundamentals/3

- 1 Distinguish the important characteristics and framework of the agriculture market
- 2 Identify the importance of trends and patterns in agriculture
- 3 Identify the resources, markets, and organizational issues involved in agriculture
- 4 Recognize the various agricultural commodity markets

AG116 Agricultural Technology/3

- 1 Identify the advantages and disadvantages of agricultural technology
- 2 Recognize the technology and innovation used in agriculture

AG140 Agribusiness Marketing and Sales/5

- 1 Explain the fundamental principles of marketing and sales as they relate to the agriculture industry
- 2 Develop and implement marketing strategies tailored to agricultural products and services
- 3 Demonstrate effective sales techniques, including prospecting, relationship-building, and closing sales
- 4 Analyze consumer behavior and market trends in the agricultural sector

AG210 Agronomy I/5

- 1 Analyze soil properties and their influence on crop production.
- 2 Interpret soil test data to recommend appropriate nutrient and fertility management practices.
- 3 Compare the effectiveness of tillage, cover cropping, and other soil conservation strategies.
- 4 Evaluate seed variety selection based on soil conditions and fertility management.
- 5 Apply knowledge of soil science to assess environmental concerns in crop production.
- 6 Relate soil characteristics to yield potential and agronomic decision-making.

AG211 Animal Science/5

- 1 Analyze current trends in animal science, including animal welfare, animal identification, and food safety
- 2 Apply practices to protect the environment in livestock operations
- 3 Demonstrate a basic understanding of the beef, dairy, and swine industries
- 4 Relate the importance of livestock feed mixing
- 5 Use terminology used in the livestock industry

AG212 Agricultural Economics/3

- 1 Explain economic concepts such as supply, demand, elasticity, and marginal analysis within an agricultural context.
- 2 Analyze market behavior and pricing strategies for agricultural goods and services.
- 3 Evaluate the role of government policy and global trade in agricultural economics.
- 4 Apply cost-benefit and breakeven analysis to farm and agribusiness decision-making.
- 5 Use economic reasoning to assess risk, resource use, and financial planning in agribusiness.

AG230 Agronomy II/5

- 1 Describe the structure and function of plant systems and their roles in crop development.
- 2 Chart the growth stages of key agronomic crops, including corn, soybeans, and wheat
- 3 Analyze the effects of environmental variables on plant health and productivity.
- 4 Evaluate the role of genetics and plant breeding in improving crop performance.
- 5 Interpret plant nutrient requirements and develop basic plant health management strategies.

AG235 Sustainable Agriculture/3

- 1 Define sustainability and its role in modern agriculture
- 2 Assess the environmental and economic impact of conventional agricultural practices
- 3 practices
- 4 Analyze the role of government policies and global initiatives in sustainable agriculture
- 5 Understand the long-term implications of sustainability on the agricultural industry's future

AG291 Agribusiness Practicum/3

- 1 All program goals

Automotive Management AAB

Program Goals

- 1 Develop management skills required for success in the automotive industry
- 2 Identify the knowledge required to work within automotive dealership operations
- 3 Analyze the administrative skill set required for parts and service management
- 4 Examine the aftermarket in the automotive industry

Courses & Objectives

AM130 Introduction to the Automotive Industry/5

- 1 Describe the functionality of automotive dealerships
- 2 Identify key aspects in the evolution of the automotive industry
- 3 Identify the impact of technology on the automotive industry
- 4 Recognize current automotive trends
- 5 Describe relevant automotive terminology
- 6 Recognize the social implications of the automotive industry

AM210 Parts & Service Management/3

- 1 Examine the importance of accounts/financial statements
- 2 Describe processes and procedures of parts and service
- 3 Recognize the role of equipment
- 4 Outline the automotive parts environment
- 5 Recognize service aspects

AM215 Automotive Aftermarket Management/5

- 1 Identify and examine procedures critical to aftermarket management
- 2 Recognize the dynamics of aftermarket relationships
- 3 Analyze routine operations and characteristics important to aftermarket management

AM220 Current Topics in Automotive Management/5

- 1 Examine government regulations as it pertains to the automotive industry
- 2 Discuss the dynamics between dealerships and manufacturers
- 3 Analyze the impact of social factors on the automotive industry
- 4 Identify the legal aspects of the automotive management
- 5 Examine the role of technology on the automotive industry
- 6 Explore economic issues as it pertains to the automotive industry

AM292 Automotive Management Capstone/3

All program goals

Information Technology - Digital Forensics AAB

Program Goals

- 1 Extend forensics to the digital crime scene
- 2 Integrate postmortem forensics and incident response
- 3 Relate data organization and recovery
- 4 Use appropriate technology tools and other resources to access, design, organize, or share information to complete the desired task
- 5 Develop the ability to investigate events as they happen on a computer and use critical thinking to deduce an appropriate next action
- 6 Start, develop, and foster a strong level of ability to examine, assess, and process information for use in rapid decision-making processes

Courses & Objectives

DF120 Analysis of Digital Media/5

- 1 Describe how open source tools operate in digital forensic examinations
- 2 Examine basic file analysis techniques
- 3 Identify activities associated with the acquisition and search of artifacts in Windows and Linux systems

DF130 Intrusion Detection & Prevention/5

- 1 Compare the difference between HIDS and NIDS
- 2 Describe the importance of using IDS systems in modern IT networks
- 3 Relate the importance of monitoring and maintaining these systems when in place

DF210 Advanced Digital Forensics/5

- 1 Analyze forensic methodologies
- 2 Compare file systems
- 3 Manipulate drive partitions

- 4 Manipulate volumes and volume forensics

DF220 Digital Forensics & Incident Response/3

- 1 Apply tools necessary to complete the task of an incident response investigator
- 2 Break down the goals of incident response and what it encompasses
- 3 Detect volatile evidence
- 4 Examine malicious code and the effects that such code will have on a machine

DF230 Mobile Device Forensics/3

- 1 Compare different operating systems and file systems on mobile devices
- 2 Differentiate key files and storage areas in mobile devices
- 3 Utilize commands and tools for mobile device forensics

DF250 Advanced Topics in Digital Forensics/5

- 1 Analyze advanced FAT forensics
- 2 Analyze advanced NTFS forensics

DF260 Network Forensics/3

- 1 Diagnose networked computers for evidence of attacks
- 2 Review log files maintained by all of the computers on a network
- 3 Utilize Microsoft Windows networking principles

DF292 Digital Forensics Capstone/3

All program goals

IT170 Ethics in Information Technology/3

- 1 Identify how one's ethical standards are formed
- 2 Correlate privacy and its relationship to ethics
- 3 Explain professional ethics and how they relate to the IT industry

IT241 Methods of Investigation/5

- 1 Apply the basic concepts of logic to situations and to the investigation process
- 2 Apply the process of critical thinking to common situations and to criminal activity
- 3 Develop and deliver an argument, based on the findings of the investigation
- 4 Understand the techniques used for profiling personalities as related to a crime
- 5 Explain the differences between deduction, induction, critical thinking, and how to apply these techniques
- 6 Develop the students' cognitive skills

Information Technology - Digital Multimedia Design AAB

Program Goals

- 1 Apply the design process when creating a digital piece of media

- 2 Perform proficient use of multimedia software
- 3 Use appropriate technology tools and other resources to access, design, organize, or share information to complete the desired task
- 4 Utilize design concepts in relation to digital multimedia

Courses & Objectives

DM118 Digital Design Fundamentals

- 1 Determine the appropriate application to use based on the medium to obtain the desired results
- 2 Identify methods used in editing graphic images for print and web use
- 3 Identify the foundational and functional applications in multimedia

DM121 Web Page Design Concepts

- 1 Apply simple debugging skills
- 2 Create and edit hypertext using HTML 5 and other languages
- 3 Create logical file directories for web design
- 4 Identify image types and resolution for incorporation into web pages
- 5 Identify new media technology

DM122 Digital Studio Fundamentals

- 1 Identify and apply proper troubleshooting skills
- 2 Identify video issues related to artificial/natural lighting, shooting times, and shadow direction
- 3 Recognize and implement realism in digital works
- 4 Use appropriate video tools, such as microphones, lighting, audio, and so forth

DM125 Graphic Imaging

- 1 Ascertain the DPI and resolution of digital images
- 2 Categorize types of graphic files and their uses
- 3 Create editable digital graphics
- 4 Employ image optimization techniques
- 5 Identify and compare color modes

DM130 Applied 3-D Modeling Concepts

- 1 Apply character modeling to 3D designs
- 2 Apply realism into 3D designs
- 3 Design and create 3D logos
- 4 Identify and apply modifiers
- 5 Identify object vertices and faces
- 6 Integrate subsurf and multires modeling into 3D designs

DM180 Applied Digital Drawing

- 1 Incorporate vector drawings in digital media

- 2 Identify the methods used in editing graphic images for print and web use
- 3 Utilize anchor points and paths to create vector art
- 4 Distinguish between usages for vector and bitmap images for various multimedia projects

DM190 Interactive Graphic Animation

- 1 Apply functions when creating media presentations
- 2 Create presentations with frame-by-frame animation
- 3 Utilize basic scripting skills
- 4 Utilize vector drawing when creating presentations

DM210 Advanced Interactive Media Presentations

- 1 Create a presentation with an interactive menu
- 2 Demonstrate advanced debugging skills
- 3 Demonstrate proper use of control structures in media
- 4 Incorporate Actionscript into media presentations
- 5 Use object-oriented programming for interactive media presentations

DM215 Advanced Web Media Design Concepts

- 1 Apply CSS Styles into web page design
- 2 Create client side scripts for web pages
- 3 Demonstrate advanced formatting skills in web design

DM223 Applied Digital Video Editing

- 1 Demonstrate knowledge of file codecs, file compression, and the various video file types
- 2 Edit a video using non-linear editing skills
- 3 Identify basic audio and video editing concepts
- 4 Identify software timeline features and FPS
- 5 Construct movies from scripts

DM226 Advanced Digital Video Editing

- 1 Edit videos using chroma key effects
- 2 Incorporate 3D effects into video
- 3 Incorporate advanced animation in digital videos
- 4 Use a clyclorama wall or effect to produce and edit a video
- 5 Use special effects during video editing

DM236 Advanced Digital Graphic Imaging

- 1 Apply color modes, layout, style, and balance
- 2 Apply photo editing and manipulation skills
- 3 Create authentic digital graphics
- 4 Create digital images and add to video

- 5 Employ proper file types based upon the image's purpose
- 6 Identify and use raster images

DM255 Applied 3-D Animation Concepts

- 1 Apply realism in movement (inverse kinetics)
- 2 Apply skinning and rigging to animations
- 3 Compare keyframe animation to interpolation
- 4 Create and edit object animations
- 5 Implement images to create a wlk cycle animation
- 6 Implement particle creation

DM292 Digital Multimedia Capstone

- 1 All Program Goals

Information Technology - Network Security AAB

Program Goals

- 1 Employ security measures across a network to defend from network threats.
- 2 Respond to active threats within a network
- 3 Use appropriate technology tools and other resources to access, design, organize, or share information to complete a desired task
- 4 Utilize networking processes and procedures to understand threat landscape
- 5 Assess implemented security measures for efficacy.

Courses & Objectives

DF100 Introduction to Digital Forensics/3

- 1 Demonstrate digital investigation techniques
- 2 Describe what is and is not admissibility of digital evidence
- 3 Identify elements of computer crime
- 4 Identify evidence collection basics

IT113 Introduction to Computer Programming/3

- 1 Identify the sequence of instructions that tell the computer what to do
- 2 Demonstrate the ability to arrange a sequence of instructions to carry out a task

IT125 Computer Hardware Fundamentals/3

- 1 Assemble a typical PC system
- 2 Diagnose computer hardware issues
- 3 Disassemble a typical PC system
- 4 Disassemble, inventory, and reassemble a computer

- 5 Identify every component inside a computer
- 6 Troubleshoot many different scenarios involving computer hardware

IT130 Management of Information Security/3

- 1 Analyze information security systems
- 2 Identify management issues in information security
- 3 Illustrate information security policy

IT150 Administering a Client Operating System/5

- 1 Create virtual machines using VMware Workstation
- 2 Perform client operating system installation and upgrade
- 3 Utilize file and folder directory structure, the registry, and common tools

IT170 Ethics in Information Technology/3

- 1 Identify how one's ethical standards are formed
- 2 Correlate privacy and its relationship to ethics
- 3 Explain professional ethics and how they relate to the IT industry

IT183 Network Fundamentals/5

- 1 Categorize the different types of criminals that could launch a computer-based attack and the theories behind combatting these attacks
- 2 Identify tasks of vulnerability assessment and risk management
- 3 Construct a secure network through the fundamentals of its design and device technologies
- 4 Analyze Internet protocols and applications including wireless networks and network-based cryptography and encryption along with analyzing this traffic

NS140 Open Source Fundamentals/3

- 1 Demonstrate proficiency using open source tools
- 2 Distinguish TCP/IP implementations and compare static and dynamic setups
- 3 Identify the purpose and main components of the registry
- 4 Use a virtual machine
- 5 Utilize file folder directory structure

NS193 Local & Wide Area Networks/5

- 1 Apply the proper usage of a variety of network protocols
- 2 Compare the features of the Internet and an Intranet
- 3 Configure and troubleshoot routers and switches
- 5 Demonstrate knowledge of networking concepts such as OSI, TCP/IP, topologies, and network hardware and functions
- 6 Design, configure, and troubleshoot networks using simulation software

- 7 Identify the main features of a V-LAN VLAN, WLAN, LAN, and WAN
- 8 Recognize the seven layers of the OSI model

NS235 Cyber Threat Foundations/3

- 1 Identify different categories of network threats
- 2 Identify Indicators of Compromise and Indicators of Attacks
- 3 Utilize network tools to detect cyber threats in a network

NS240 Operating Systems Security/3

- 1 Apply security measures to prevent exploitation of the registry OR Apply security measures to prevent exploitation of the core OS components
- 2 Compare cryptographic mechanisms and exploits
- 3 Compare different operating systems
- 4 Employ security features of TCP/IP implementation

NS250 Open Source Server Administration/3

- 1 Apply DHCP to servers to automatically assign TCP/IP addresses
- 2 Compare different distros to determine correct OS for the need OR Configure the kernel as part of server administration
- 3 Implement name resolution
- 4 Use shell scripting for server administration

NS260 Firewall Administration/5

- 1 Assemble secure firewall protected networks
- 2 Compare anti-virus, anti-spyware, and file blocking hardware capabilities
- 3 Compare hardware-based and software-based firewall technologies
- 4 Demonstrate knowledge of SSL and Ipsec VPN services

NS280 Intrusion Detection Systems Administration/3

- 1 Classify intrusion detection prevention systems (IDPS)
- 2 Configure an intrusion detection prevention system
- 3 Evaluate reconnaissance, enumeration, access, and exploitation vulnerabilities of network systems
- 4 Evaluate the effectiveness of student configured IDPS
- 5 Examine IDPS and monitor network/system activities for malicious activity

NS283 Ethical Hacking Foundations/3

- 1 Utilize ethical hacking tools to assess security configurations
- 2 Modify security configurations to defend against new threats
- 3 Review the attack process of emerging threats

Information Technology - System Administration AAB

Program Goals

- 1 Appraise networking using various protocols.
- 2 Employ the tools necessary to administer the client/server operating system
- 3 Use appropriate technology tools and other resources to access, design, organize or share the information to complete the desired task
- 4 Utilize client/server operating systems in a network environment
- 5 Administer a cloud environment

Courses & Objectives

IT113 Introduction to Computer Programming/3

- 1 Identify the sequence of instructions that tell the computer what to do
- 2 Demonstrate the ability to arrange a sequence of instructions to carry out a task

IT125 Computer Hardware Fundamentals/3

- 1 Assemble a typical PC system
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- 3 Disassemble a typical PC system
- 4 Disassemble, inventory, and reassemble a computer
- 5 Identify every component inside a computer
- 6 Troubleshoot many different scenarios involving computer hardware

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- 5 Examine IDPS and monitor network/system activities for malicious activity

SA110 Operating System Fundamentals/5

- 1 Create and manage users, computers, and groups in a Microsoft server environment
- 2 Identify disaster recovery plans
- 3 Identify post-installation system settings on a computer
- 4 Identify skills to manage and maintain physical/logical devices and access to resources in a Microsoft server environment

SA115 Database Design & Development/3

- 1 Compare different database types
- 2 Create and implement a database
- 3 Examine database designs and structures
- 4 Identify and gather information about the fields to be stored in a database

SA130 Administering a Server Environment I/5

- 1 Configure DNS in a Windows server environment
- 2 Discuss network infrastructure maintenance
- 3 Examine Active Directory Domain Services and Group Policy
- 4 Examine routing and remote access implementation, management, and maintenance
- 5 Identify network IP routing and DHCP services
- 6 Identify the skills to install and configure a server
- 7 Manage and monitor a server environment

SA220 Administering a Server Environment II/5

- 1 Configure active directory infrastructure

- 2 Create and maintain active directory objects
- 3 Examine and employ server monitoring and management tools
- 4 Manage, monitor, and optimize the desktop environment using Group Policy

SA230 Server Utilities/5

- 1 Configure active directory infrastructure
- 2 Implement Hyper-V and Server Core
- 3 Utilize Active Directory

SA245 Emerging Trends in Computing/3

- 1 Identify and describe fundamental cloud computing terminology and concepts
- 2 Identify and describe IaaS (Infrastructure as a Service)
- 3 Identify and describe PaaS (Platform as a Service)
- 4 Identify and describe platforms and applications used by cloud computing end users
- 5 Identify and describe SaaS (Software as a Service)

SA292 System Administration Capstone/3

- 1 All Program Goals

AAB in Logistics & Supply Chain Management

Program Goals

- 1 Acquire a comprehensive understanding of the fundamental operational practices and principles that drive effective supply chain management. Discern suitable strategies for customer service, manufacturing, procurement, distribution operations, facility design, and quality control.

Develop a keen awareness of informational and financial complexities associated with planning, staffing, and operating a supply chain. Analyze and address the multifaceted issues that arise in these areas, ensuring efficient and effective supply chain management.
- 2 Exhibit proficient oral and written communication skills, effectively conveying ideas and information in a clear and articulate manner.
- 3 Engage in producing and analyzing quantitative information, showcasing their proficiency in critical thinking and problem-solving. Demonstrate the ability to approach complex challenges, apply logical reasoning, and devise effective solutions.

Courses & Objectives

MA131 Introduction to Logistics & Supply Chain Management/3

- 1 Develop a solid foundational comprehension of the fundamental principles, concepts, and theories that underlie effective logistics and supply chain management, serving as the cornerstone for advanced studies in the field
- 2 Acquire the skills necessary to proficiently plan and coordinate the movement of goods, information, and resources within intricate supply chain networks, ensuring smooth operations and minimal disruptions
- 3 Gain expertise in optimizing the flow of resources, including raw materials, finished products, and information, to enhance efficiency, reduce costs, and enable timely responses to market demands
- 4 Develop an understanding of the interplay of variables within supply chain dynamics, enabling strategic decision-making that considers the holistic impact on various stages of the supply chain and overall business performance

MA151 Intermodal Transportation Systems/3

- 1 Develop a strong foundational understanding of the core principles, concepts, and theories that underpin effective transportation management, laying the groundwork for further specialization in the field
- 2 Acquire the skills necessary to analyze various transportation options, considering factors such as cost, efficiency, environmental impact, and regulatory requirements, in order to make informed decisions
- 3 Gain expertise in navigating the complexities of transportation networks, including routes, modes of transport, and logistics hubs, ensuring efficient movement of goods and people while minimizing bottlenecks and delays.
- 4 Develop the ability to manage the movement of goods and individuals across diverse industries, applying strategic planning, coordination, and optimization techniques to ensure timely and cost-effective transportation solutions

MA163 Production & Operations Management/3

- 1 Develop a strong foundational understanding of the key principles, concepts, and theories that form the basis of production and operations management, laying the groundwork for more advanced studies in the field.

- 2 Acquire the skills needed to analyze and optimize the allocation of resources, including materials, labor, and technology, to improve production processes and operational efficiency
- 3 Gain expertise in identifying bottlenecks, redundancies, and inefficiencies within production and operational workflows, and learn techniques to streamline processes for enhanced productivity
- 4 Develop the ability to contribute to the success of diverse industries by applying strategic planning, efficient resource management, and effective process optimization, leading to improved overall operational performance and business outcomes

MA221 Purchasing & Sourcing/3

- 1 Develop a solid comprehension of the foundational principles and strategies that drive the procurement and sourcing of goods and services, enabling a deeper understanding of their significance within organizational contexts
- 2 Acquire the skills necessary to proficiently manage the entire procurement process, from identifying needs and selecting suppliers to executing purchases, fostering effective vendor relationships, and ensuring timely deliveries
- 3 Gain expertise in negotiating contracts that are advantageous for both parties involved, mastering techniques to secure favorable terms, mitigate risks, and establish transparent agreements that promote long-term collaboration
- 4 Explore strategies to optimize supply chain dynamics, ensuring seamless coordination among procurement, inventory management, and distribution, with the aim of achieving cost savings, minimizing disruption, and enhancing overall operational efficiency

MA241 Current Topics in Logistics & Supply Chain

- 1 Delve into the exploration of emerging trends and dynamics shaping the logistics and supply chain management landscape, fostering an adept understanding of the evolving industry milieu
- 2 Develop the ability to critically analyze and address intricate challenges currently faced within logistics and supply chain operations, utilizing advanced problem-solving skills to propose effective solutions
- 3 Gain the skills to navigate the ever-changing market dynamics by staying attuned to shifts in demand, technological advancements, and regulatory changes, enabling agile and informed decision-making

- 4 Acquire proficiency in identifying and leveraging innovation practices, technologies, and methodologies to optimize logistics and supply chain operations, enhancing efficiency, sustainability, and competitiveness

MA292 Logistics & Supply Chain Capstone/2

- 1 Acquire a comprehensive understanding of the fundamental operational practices and principles that drive effective supply chain management
- 2 Develop a keen awareness of the informational and financial complexities associated with planning, staffing, and operating a supply chain
- 3 Equipped to analyze and address the multifaceted issues that arise in these areas, ensuring efficient and effective supply chain management
- 4 Gain the ability to discern suitable strategies for customer service, manufacturing, procurement, distribution operations, facility design, and quality control

Motorsports Marketing BS

Program Goals

- 1 Apply marketing concepts in the motorsports industry
- 2 Analyze legal documents common in marketing and relation to the motorsports industry
- 3 Understand the history and governance of the various motorsports organizations
- 4 Create promotional campaigns, including traditional, nontraditional, and social media within the motorsports industry
- 5 Interpret the analytics and ROI in order to provide reports to stakeholders in the industry
- 6 Use design tools to create effective and impactful marketing deliverables
- 7 Develop external communications, including press releases, social media content, and blogs
- 8 Build presentation skills to effectively communicate ideas to prospective consumers and sponsors in the motorsports industry

Courses & Objectives

MSP 280 Introduction to Motorsports - History & Impact/3

- 1 Explain the historical timeline of motorsports.
- 2 Identify the types of motorsports the industry.
- 3 Explain the key events and the key players in the history of the industry.
- 4 Analyze how the motorsport industry has grown and influenced American culture.

MSP 310 Motorsports - Administration, Governance, & Policy/3

- 1 Explain the structures of motorsport organizations.

- 2 Identify the policy makers within each motorsport organization.
- 3 Describe the current policies for each organization.
- 4 Illustrate the organizations, structure and policies.

MSP 336 PR & Event Planning in the Motorsports Industry/3

- 1 Compose press releases for effective communication to external agencies.
- 2 Develop event planning skills and understand the importance of attention to detail in your plans.
- 3 Create a strategy and plan to manage PR and social media at schedule events.

MSP 350 Specialized Media in the Motorsports Industry/3

- 1 Explain the types of traditional and non-traditional media.
- 2 Create an advertising plan incorporating the traditional and non-traditional media.
- 3 Analyze the importance of non-traditional media within the motorsport industry.

MSP 410 Field Experience/3

- 1 Apply course theory and skills in a real-world setting within the motorsports industry.
- 2 Understand the importance of critical thinking and making decisions that will impact the organization and event.
- 3 Learn what is needed to be executed and accomplished before each event.

MSP 420 Gaining Sponsorships in Motorsports/5

- 1 Create sales decks for presenting to potential sponsors.
- 2 Implement basic skills and techniques of sales and expand in order to effectively gain sponsorships.
- 3 Explain the challenges of obtaining sponsorships in the motorsport industry, and how to overcome those challenges.

MSP 490 Managing the Motorsports Marketing Strategy/5

- 1 Design and develop a marketing campaign that will include sales, social media, event planning, obtaining sponsorships, and any and all traditional media for a driver, team, track, or organization.
- 2 Assess the success of the campaign by collecting data and determining the ROI.
- 3 Present the process, components, and results to the client or a representative.

Office Management AAB

Program Goals

- 1 Apply effective written and oral communication skills
- 2 Demonstrate office tools and technology
- 3 Demonstrate proficiency in keyboarding skills
- 4 Apply correct document formatting
- 5 Prepare documents within office software applications

Courses & Objectives

DP117 Database Applications/3

- 1 Create databases, tables, queries, forms, and reports
- 2 Distinguish the purpose and use of databases

DP150 Spreadsheet Applications/3

- 1 Apply appropriate formatting to spreadsheet data
- 2 Create basic spreadsheet features and concepts
- 3 Create basic spreadsheet formulas to calculate answers
- 4 Create spreadsheet formulas using appropriate cell referencing

DP155 Developing Business Presentations/5

- 1 Demonstrate enhanced presentation skills
- 2 Demonstrate enhanced software application skills by applying special features to slide show
- 3 Employ effective communication skills, especially oral presentation skills

DP210 Advanced Spreadsheet Applications/3

- 1 Apply advanced formatting to spreadsheet data
- 2 Create advanced spreadsheet formulas and functions to calculate answers
- 3 Create advanced spreadsheet formulas using appropriate cell referencing
- 4 Utilize knowledge of advanced spreadsheet features and concepts

KY146 Keyboarding I/5

- 1 Create properly formatted documents at a beginner level
- 2 Demonstrate speed and accuracy at a beginner level
- 3 Revise documents after proofreading or from proofreader notations at a beginner level

KY147 Keyboarding II/5

- 1 Create properly formatted documents at an intermediate level
- 2 Demonstrate speed and accuracy at an intermediate level
- 3 Revise documents after proofreading or from proofreader notations at an intermediate level

KY250 Keyboarding III/5

- 1 Create properly formatted documents at an advanced level
- 2 Demonstrate speed and accuracy at an advanced level
- 3 Revise documents after proofreading or from proofreader notations at an advanced level

OP135 Machine Transcription I/3

- 1 Apply correct formatting to typed documents
- 2 Apply correct grammar, punctuation, and capitalization to documents
- 3 Apply spelling corrections to misspelled words
- 4 Proofread to ensure error-free documents

5 Transcribe dictated documents

OP149 Records Management/3

- 1 Apply the electronic filing procedure for records
- 2 Complete activities and exercises related to full records life cycle
- 3 Employ the manual filing procedure for records

OP235 Machine Transcription II/3

- 1 Correct formatting, capitalization, grammar, spelling, and punctuation in pre-dictated documents
- 2 Edit the basic sentence structure and subject/verb agreement in pre-dictated documents
- 3 Edit transcribed office-style dictation of letters using mail-ability standards

OP276 Office Procedures/5

- 1 Describe office preparations
- 2 Prioritize office tasks
- 3 Summarize office planning procedures
- 4 Utilize effective office communication skills

OP292 Office Technology Capstone/3

- 1 All Program Goals

WP138 Introduction to Word Processing Applications/3

- 1 Create basic word processing documents using appropriate document organization and formatting
- 2 Create basic word processing documents with appropriate referencing and collaboration
- 3 Apply basic software functions and file management techniques
- 4 Demonstrate knowledge of basic office fundamentals

WP267 Advanced Word Processing Applications/3

- 1 Demonstrate advanced document organization techniques
- 2 Apply advanced document formatting techniques
- 3 Utilize advanced software functions
- 4 Employ advanced document referencing features
- 5 Prepare and participate in advanced document collaboration

WP277 Document Design/5

- 1 Utilize desktop publishing features
- 2 Create visually effective documents, such as newsletters, brochures, and flyers

Sport Marketing & Management AAB

Program Goals

- 1 Appraise legal issues surrounding the sport industry
- 2 Demonstrate the necessary skills for managing in today's sport industry

- 3 Demonstrate knowledge of the foundation, history, concepts, and principles of the sport industry
- 4 Examine issues and controversies relating to the sport industry
- 5 Investigate the necessary skills for marketing in today's sport industry
- 6 Integrate the concept of fitness into the sport industry

Courses & Objectives

SM130 Principles of Sport Management/5

- 1 Identify and describe sports management concepts of scope, organization, and common practice

M150 Sport in Society/3

- 1 Identify and describe the various jobs available in the sport industry
- 2 Locate, plan, and complete an internship opportunity in the sport industry

SM170 Managing Fitness Concepts/3

- 1 Demonstrate strategies for proper nutrition
- 2 Demonstrate strategies for stress management
- 3 Describe lifestyles for health, fitness, and wellness
- 4 Distinguish appropriate physical activity based upon body mechanics and composition

SM190 Sport Marketing/5

- 1 Define marketing terminology specifically related to the sport industry
- 2 Demonstrate knowledge of sport marketing theory by identifying how it can be used in the sport industry to meet the wants and needs of the sport consumer
- 3 Identify sport marketing research, sponsorship plans, and sales strategies
- 4 Identify the five "Ps" of sport marketing

SM230 Facility and Event Management/3

- 1 Analyze and discuss the many factors of facility management, such as site planning, development, facility design, maintenance, cost, and construction-related concerns
- 2 Demonstrate knowledge of ways to market a facility
- 3 Describe the responsibilities of a facility manager and the management side of the industry
- 4 Evaluate methods of crowd management
- 5 Propose marketing options for given scenarios
- 6 Recommend solutions for various scenarios of crowd management

SM240 History of Sport in the United States/3

- 1 Analyze consumer behavior and its effect on the history of sport
- 2 framework
- 3 Identify where our games and pastimes came from, how they developed, and what they have meant to Americans

SM250 Sport Law/5

- 1 Compare/contrast the difference between professional and amateur sport law
- 2 management
- 3 Demonstrate knowledge of the ADA and Title IX discrimination rules as they pertain to sports law

SM289 Sport Internship I/1

- 1 Explore the various types of jobs available in the sport industry
- 2 Arrange an internship in the sports management field

SM290 Sport Internship II/3

- 1 Identify and describe the various jobs available in the sport industry
- 2 Locate, plan, and complete an internship opportunity in the sport industry

SM292 Sport Capstone/3

All Program Goals

Sport Marketing & Management BS

Program Goals

- 1 Appraise legal issues surrounding the sport industry
- 2 Demonstrate the necessary skills for managing in today's sport industry
- 3 Demonstrate knowledge of the foundation, history, concepts, and principles of the sport industry
- 4 Examine issues and controversies relating to the sport industry
- 5 Investigate the necessary skills for marketing in today's sport industry
- 6 Integrate the concept of fitness into the sport industry
- 7 Analyze issues and controversies relating to the sport industry
- 8 Examine marketing concepts in today's sport industry
- 9 Assess the legal and economic issues surrounding the sport industry

Courses & Objectives

SM130 Principles of Sport Management/5

- 1 Identify and describe sports management concepts of scope, organization, and common practice

M150 Sport in Society/3

- 1 Identify and describe the various jobs available in the sport industry
- 2 Locate, plan, and complete an internship opportunity in the sport industry

SM170 Managing Fitness Concepts/3

- 1 Demonstrate strategies for proper nutrition
- 2 Demonstrate strategies for stress management
- 3 Describe lifestyles for health, fitness, and wellness

- 4 Distinguish appropriate physical activity based upon body mechanics and composition

SM190 Sport Marketing/5

- 1 Define marketing terminology specifically related to the sport industry
- 2 Demonstrate knowledge of sport marketing theory by identifying how it can be used in the sport industry to meet the wants and needs of the sport consumer
- 3 Identify sport marketing research, sponsorship plans, and sales strategies
- 4 Identify the five "Ps" of sport marketing

SM230 Facility and Event Management/3

- 1 Analyze and discuss the many factors of facility management, such as site planning, development, facility design, maintenance, cost, and construction-related concerns
- 2 Demonstrate knowledge of ways to market a facility
- 3 Describe the responsibilities of a facility manager and the management side of the industry
- 4 Evaluate methods of crowd management
- 5 Propose marketing options for given scenarios
- 6 Recommend solutions for various scenarios of crowd management

SM240 History of Sport in the United States/3

- 1 Analyze consumer behavior and its effect on the history of sport
- 2 framework
- 3 Identify where our games and pastimes came from, how they developed, and what they have meant to Americans

SM250 Sport Law/5

- 1 Compare/contrast the difference between professional and amateur sport law
- 2 management
- 3 Demonstrate knowledge of the ADA and Title IX discrimination rules as they pertain to sports law

SM300 Sport Communication/5

- 1 Appraise the concepts, scope, organization, and common practices in the sport management industry
- 2 Evaluate effective management practices as applied to the field of sport management
- 3 Examine the potential career fields in sport management and the special qualifications required of those fields

SM320 Sport Promotion/5

- 1 Compare sport branding and licensures
- 2 Compare sport promotion tools
- 3 Interpret sport sales management with ticketing and sponsorships

SM380 Psychology of Sport/3

- 1 Analyze personal factors affecting performance and psychological development
- 2 Evaluate techniques and psychological factors used to increase performance and well-being
- 3 Interpret situational factors that influence behavior

SM400 Special Topics in Sport/3

- 1 sophisticated sport industry
- 2 Evaluate how organizational theory concepts can be applied to issues in an actual work setting
- 3 Integrate sport organization theory to real-world situations

SM450 Sport and Public Policy/5

- 1 Analyze the structure of professional sports
- 2 Assess amateur athletics, participation, and public health
- 3 Evaluate professional sports, cities, and public finance
- 4 Examine sport and globalization

SM488 Sport Internship I/1

- 1 Research the various types of jobs available in the sport industry
- 2 Set up an internship in the sports management field

SM489 Sport Internship II/3

- 1 Synthesize knowledge of sports management by working as an intern in the sports industry

SM490 Sport Capstone/3

- 1 All Program Goals

Travel & Hotel Management AAB

Program Goals

- 1 Demonstrate knowledge of tourism, hospitality and event operations, marketing and management
- 2 personal attributes, including patience and service, relevant to tourism, hospitality and event profession
- 3 Apply analytical and problem-solving skills to help deal successfully with the challenging needs of the tourism, hospitality and event industry
- 4 Recognize and describe the latest technology and newest innovations used in tourism, hospitality and event industry
- 5 Demonstrate knowledge of geography, types of tourists, and types of tourism destinations
- 6 Plan small, midsize and large events
- 7 Plan private and organizational travel itineraries

Courses & Objectives

TR105 Introduction to Tourism & Hospitality Industry Management/3

- 1 Identify and describe the evolution of the tourism & hospitality industry
- 2 Identify terminology of the tourism and hospitality industry
- 3 Develop an understanding of the level of guest service required by tourism and hospitality staff and management within the individual sectors of industry

TR126 Cruises & Airline Operations/5

- 1 Illustrate the anatomy, operation protocols and marketing of all commercial passenger ships, ferries, and yachts
- 2 Demonstrate knowledge of the evolution of the passenger cruise ship industry which includes explaining the Titanic sinking and its impact on the passenger cruise sector
- 3 Convey an example of a cruise ship's passenger itinerary
- 4 Illustrate the evolution, the operation and management protocols and marketing of airports and commercial passenger airlines.
- 5 Explain the itinerary relationship between the airlines and cruise lines.
- 6 Identify careers and working conditions within the cruise and airline industry
- 7 Identify Domestic (U.S.) and international airport codes

TR132 Tourism Destinations I/3

- 1 Illustrate logical tourism destination itineraries
- 2 Demonstrate map skills
- 3 Apply geography skills for the travel professional
- 4 Identify the characteristics of specific travelers and their destinations of interest

TR136 Tourism Destinations II/3

- 1 Illustrate logical tourism destination itineraries
- 2 Demonstrate map skills
- 3 Apply geography skills for the travel professional
- 4 Identify the characteristics of specific travelers and their destinations of interest

TR230 Event Planning & Management I/3

- 1 Examine and describe the different planning and management techniques needed to execute various types of small and mid-sized events found in different environments within the tourism and hospitality industry
- 2 Research careers and employment opportunities as staff and management in large event sector of tourism and hospitality
- 3 Analyze how to manage subordinates for performance, including conflict, discipline, and appraisal

- 4 Create or demonstrate an event plan with quality service for a guest in a large event environment

TR235 Event Planning & Management II/3

- 1 Examine and describe the different planning and management techniques needed to execute various types of large events found in different environments within the tourism and hospitality industry
- 2 Research careers and employment opportunities as staff and management in large event sector of tourism and hospitality
- 3 Explain MEEC, MICE, and SMERF along with the difference between a meeting, exhibition, and convention
- 4 Analyze how to manage subordinates for performance, including conflict, discipline, and appraisal
- 5 Create or demonstrate an event plan with quality service for a guest in a large event environment

TR240 Hotel & Motel Management/5

- 1 Describe and apply knowledge of the front office operations terminology and duties within the hospitality lodging industry such as room availability, average daily rate, occupancy rate, check-in check-out procedures, and night audit duties
- 2 Demonstrate knowledge of sales promotions, advertising, distribution channels, and public relations
- 3 Identify staff and management positions and duties a hotel/motel operation while exploring attainable careers within the hotel/motel sector
- 4 Analyze how to manage subordinates for performance, including conflict, discipline, and appraisal
- 5 Demonstrate delegation and empowerment skills

TR245 Food & Beverage Management/5

- 1 Analyze effective operation management of the food and beverage departments in different environments by their use of such cost metrics as food cost, beverage cost labor cost, paper cost, and linen cost, etc.
- 2 Classify types of restaurants, owners, locations, and concepts
- 3 Summarize types of food and beverage menus that restaurants, contract food service accounts, bars/taverns, and catering companies use based on different customers/clients
- 4 Networking with hospitality industry professionals and knowledge of trends by attending the NRA's International Chicago Food and Hotel Show after joining the National Restaurant Association
- 5 Demonstrate the knowledge of the operation and management tools of the food and beverage operations or restaurant

TR250 Hospitality Sales & Marketing/3

- 1 Apply market research in the travel and tourism industry
- 2 Identify marketing strategies such as Segmentation, Targeting, Positioning, and the 7P's of services marketing to create and implement within a marketing plan
- 3 Identify target markets in the industry

TR255 Resort Management I/3

- 1 Analyze resort-specific issues in guest relations and management within the resort sector of tourism and hospitality
- 2 Compare similarities and differences in managing resorts versus managing traditional hotels and motels
- 3 Identify the relationship between casinos and other sectors of the travel and hospitality industry
- 4 Demonstrate the knowledge of the operations, management, and employment positions within a casino resort
- 5 Describe the evolution of the casino and gaming industry casino resorts, while exploring future trends in the casino and gaming industry

TR260 Resort Management II/3

- 1 Analyze resort-specific issues in guest relations and management within the resort sector of tourism and hospitality
- 2 Explain the different types of sport and entertainment resorts that exist in the tourism and hospitality industry and their demographic
- 3 Illustrate knowledge of calculating design and operation management formulas used in the resort sector of the tourism and hospitality Industry
- 4 Identify the similarities and differences between motels/hotels, resorts, and timeshare accommodations
- 5 Demonstrate the knowledge of the operations and management of a sport, entertainment, or health related resort

TR292 Travel Capstone/3

- 1 All Program Goals