Mechanics-Diesel/Heavy Equipment (MECN)

Community and Technical College
Diesel & Heavy Equipment Program
907-455-2800

MECN F104 Mobile Equipment Maintenance
1 Credit
Offered As Demand Warrants
Technical, financial and legal aspects of mobile equipment maintenance. Students will work in groups to perform a maintenance operation and create maintenance records on a variety of vehicle types.
Lecture + Lab + Other: 0.5 + 1 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F112 Basic Auto Maintenance
1 Credit
Offered As Demand Warrants
Covers basic automobile system functions, owner maintenance of electrical, cooling and fuel systems, auto lubricants and fluids, tires and wheels, tune-ups, and cold weather maintenance and operation. For the person without mechanical experience.
Lecture + Lab + Other: 1 + 0 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F154 Diesel Fuel Injection
2 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 0 + 0 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F159 Manual Transmissions and Clutches
2 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 1 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F201 Advanced Automobile Equipment Electronics
2 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 1 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F202 Principles of Electric Drive Vehicles
2 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 2 + 0 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F203 Basic Power Generations
3 Credits
Offered As Demand Warrants
Portable and stationary electric power generators and the relationship of magnetism, AC/DC currents, motors, generators, transformers and electrical distribution.
Recommended: AUTO F110.
Lecture + Lab + Other: 2 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F204 Basic Alternating Current Electrician Skills
2 Credits
Offered As Demand Warrants
Basic residential and commercial electrician skills; current theory and applications; electrical measurement and circuitry.
Lecture + Lab + Other: 1 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F205 Uninterruptible Power Supplies
1 Credit
Offered As Demand Warrants
Residential and commercial power supplies; troubleshooting batteries; electronic components; reading UPS schematics.
Lecture + Lab + Other: 0.5 + 1 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F206 Emergency Backup Power Generation
1 Credit
Offered As Demand Warrants
Language and fundamentals of electricity; circuitry; conductor types and sizes; writing methods; system requirements of power generation.
Lecture + Lab + Other: 0.5 + 1 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F207 Power Generation Governors
2 Credits
Offered As Demand Warrants
Mechanically and electrically controlled engines with emphasis on what is a governor and what is its function in power generation will be covered in the hands-on diagnostic training.
Lecture + Lab + Other: 1 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus

MECN F208 Alternative Fuels
2 Credits
Offered As Demand Warrants
History of fuels with emphasis on the known alternative fuels: natural gas, methanol, ethanol and propane. A research project is required.
Lecture + Lab + Other: 1 + 2 + 0
Grading System: Letter Grades with option of Plus/Minus