

mobile applications. Students will learn industrial relevant skills including how to: operate, install, analyze performance, and design basic transmission systems using chains, v-belts, spur gears, bearings, and couplings. Vibration analysis will be used to determine when to perform maintenance of power transmission components. Prerequisites: IPOP 165. Corequisites: MECH-236, MECH-237, MECH-261, MECH-262. Offered: Fall. Faculty Permission Required.

MECH-236 Lubrication 1 cr.
This course teaches the technical skills needed to operate, install, tune, maintain and troubleshoot automatic lubrication systems. Lubrication concepts, setup and tuning, pneumatic pumps, series progressive valve systems and microprocessor based lubrication controllers will be covered. Prerequisites: TAKE IPOP-165. Corequisites: MECH-235, MECH-237, MECH-261, MECH-262 Offered: Fall. Faculty Permission Required.

MECH-237 Hydraulics I 2 cr.
This course teaches fundamentals of hydraulic systems used in industry mobile applications. Students learn industry-relevant skills including how to operate, install, analyze performance, and design basic hydraulic systems. This course will teach intermediate hydraulic components and system applications. Prerequisites: TAKE IPOP-165. Corequisites: MECH-235, MECH-236, MECH-261, MECH-262 Offered: Fall. Faculty Permission Required.

MECH-261 Pumps I 4 cr.
This course teaches how to select, operate, install, maintain and repair the many types of pumps used by industry. Prerequisites: TAKE IPOP-165. Corequisites: MECH-235, MECH-236, MECH-237, MECH-262. Offered: Fall. Faculty Permission Required.

MECH-262 Piping Systems 2 cr.
This course teaches how to install, maintain and trouble fluid systems. Prerequisites: TAKE IPOP-165. Corequisites: MECH-235, MECH-236, MECH-237, MECH-261. Offered: Fall. Faculty Permission Required.

MECH-263 Mechanical Drives II 4 cr.
This course will build on MECH 235 and will focus on bearings and gears used in heavy-duty mechanical transmission systems. This course will emphasize linear axis drives, clutches, and brakes. Prerequisites: MECH-262. Corequisites: MECH-264, MECH-265, MECH-266, MECH-267. Offered: Spring. Faculty Permission Required.

MECH-264 Rigging 2 cr.
This course teaches how to safely move loads of different shapes and sizes using a variety of methods. Students will use hoists, slings, ropes, and fittings to learn how to safely lift a wide variety of loads. Prerequisites: TAKE MECH-262. Corequisites: MECH-263, MECH-265, MECH-266, MECH-267. Offered: Spring. Faculty Permission Required.

MECH-265 Hydraulics II 2 cr.
This course builds on the concepts learned in MECH 237 and teaches advanced hydraulic systems. Students will learn operation of advanced hydraulic systems application, equipment installation,

performance analysis of motors and pumps, accumulators, control, relief and check valves, equipment maintenance, and system design. Prerequisites: MECH-262. Corequisites: MECH-263, MECH-264, MECH-266, MECH-267. Offered: Spring. Faculty Permission Required.

MECH-266 Pumps II 2 cr.
This course builds around the concepts learned in MECH 261. Disassembly, inspection and reassembly of centrifugal and positive displacement pumps will be covered. Prerequisites: TAKE MECH-262. Corequisites: MECH-263, MECH-264, MECH-265, MECH-267. Offered: Spring. Faculty Permission Required.

MECH-267 Maintenance Project 2 cr.
This course is the final project in the AAS.MECH program. Students will utilize what they've learned in previous MECH courses to complete the project. Prerequisites: TAKE MECH-262. Corequisites: MECH-263, MECH-264, MECH-265, MECH-266. Offered: Spring. Faculty Permission Required.

MEDICAL LABORATORY TECHNICIAN

MLTS-110 Medical Laboratory - Providing 2 cr.
Overview of medical terminology and survey of specialty areas within the profession. Selected laboratory sessions will be related to health maintenance. Offered: Fall & Spring. Faculty Permission Required.

MLTS-120 Intro to Medical Laboratory Sc 3 cr.
Introduces the student to the scope of practice of the laboratory professional. Students will use or apply basic concepts used in the medical laboratory including terminology, instrumentation, safety, basic statistics, physician office settings and quality assurance. Selected areas of laboratory practice will be presented. Prerequisites: Completion of ENGL-099, RDNG-113, and MATH-095 or appropriate English, Math, and Reading Accuplacer scores. Offered: Fall.

MLTS-160 Theory of Phlebotomy 2 cr.
Introduction to blood specimen collection and processing. Content areas include related body system anatomy and function, site selection, equipment and supplies, anticoagulants, specimen processing, safety, universal precautions, professionalism, ethics and review of the health care delivery system. Minimum grade required: C Offered: All.

MLTS-161 Phlebotomy Practice 2 cr.
100 clock hours of applied phlebotomy experience with a minimum of 100 documented blood procurements. Successful completion of MLTS 160 and MLTS 161 enable the student to sit for a national certification examination. Practice times to be arranged at selected clinical affiliates by the Program Director. Minimum grade required: C. Prerequisites: MLTS-160 with a grade of C or higher. Offered: All.

MLTS-210 Clinical Hematology 4 cr.
Introduction to theory and practice of hematology. Topics include principles of cell production, function, cell counting, classification, and morphology. Manual and automated instrumentation methods and correlation of results with pathophysiology are covered. Minimum grade required: C. Prerequisites: MLTS-120 and MLTS-160. Admission into MLT program required. Offered: Spring.