

brake components. Corequisites: DIME-124, DIME-230. Semester offered: Spring.

DIME-124 Drivetrains 4 cr.
Study of the theory and operation of medium and heavy duty truck manual drivetrains, clutches, manual transmissions, drivelines, differentials and final drive components. Corequisites: DIME-123, DIME-230. Semester offered: Spring.

DIME-125 Steering 5 cr.
Theory and operation of steering systems for medium and heavy-duty trucks. Steering component diagnosis and repair, wheel alignment and wheel end component adjustment, inspection and repair. Corequisites: DIME-126, DIME-240. Semester offered: Fall.

DIME-126 Suspensions 4 cr.
Theory and operation of suspension systems for medium and heavy-duty trucks. Corequisites: DIME-125, DIME-240. Semester offered: Fall.

DIME-127 Fluid Power 5 cr.
A study of liquids and their ability to accomplish work. Hydrodynamic, hydrostatic and computer-controlled hydraulic systems will be discussed. Corequisite: DIME-128. Semester offered: Spring.

DIME-128 HVAC 4 cr.
Studies the theory and operation of mobile HVAC systems in equipment and medium/heavy duty on-highway trucks. Corequisite: DIME-127. Semester offered: Spring.

DIME-129 Drivability 5 cr.
Study of vehicle/equipment electronics, engine management and emissions systems. Will incorporate the use of electronic service tools, software programs, on-board diagnostics, multiplexing and diesel emission after treatment. Corequisite: DIME-213. Prerequisite: AUTE-113. Semester offered: Spring.

DIME-207 Apprentice Mechanical Training VIII 8 cr.
This advanced course will review the student's skills as they apply to meeting the requirements of BHP. Safety and work ethics are emphasized.

DIME-213 Advanced Electrical 5 cr.
Study of vehicle/equipment electrical and electronic control and monitoring systems, including senders, sensors, wiring, etc. Diagnosis and repairs will be performed on various manufacturers' equipment and components. Corequisite: DIME-129. Prerequisite: AUTE-113. Semester offered: Spring.

DIME-230 Advanced Brakes and Drivetrains 5 cr.
Study of hydraulic operated/assisted drive trains. Retarders, variable, fixed and lockup torque converters, shuttle shift/power-shift electronic control transmissions, differentials and final drives, foundation brake components for off highway/construction/mining equipment will be covered. Diagnosis and repairs will be performed on various manufacturer equipment and components. Safety will be strictly enforced. Corequisite: DIME 130. Semester offered: Spring odd numbered years.

DIME-240 Advanced Steering and Suspension 5 cr.
This course will be based on the study of steering systems and suspension systems for off highway equipment. Diagnosis and repairs will be performed on various manufacturers' equipment and components. Safety will be strictly enforced. Corequisite: DIME 140. Semester offered: Spring even numbered years.

DIME-280 Cooperative Education 1-16 cr.
This course provides learning experiences gained in employment. Student will be evaluated jointly by college personnel and employer. Prerequisites: Successful completion of first semester Diesel courses in the student's selected program option.

DIGITAL MEDIA ARTS AND DESIGN

DMAD-110 Introduction to Multimedia 3 cr.
A general introduction to the concepts and software used in creating multimedia. Course focuses on how each individual element plays an important role in communicating messages and how use of multiple media can increase and change messages. This hands on survey introduces relevant multimedia technologies, with a focus on interactive media platforms such as the web, DVD's, CD's, electronic documents and examines current multimedia trends.

DMAD-170 Intro to Digital Image Editing 2 cr.
A general introduction to digital image editing using Adobe Photoshop. This course introduces the workspace and focuses on the programs tools for image editing and retouching. Projects in this class will be optimized for both print, web, and video distribution.

DMAD-172 Digital Image Editing Intermediate Techniques 2 cr.
Focuses on intermediate digital image editing techniques using Adobe Photoshop. Students will begin to work with selection tools, layers and basic image compositing. Projects in this class will be optimized for print, web and video distribution.

DMAD-174 Digital Image Editing Advanced Compositing 2 cr.
Designing programs for the Windows Graphical User Interface. A modern object-oriented language with good GUI capabilities will be used. Prerequisite: COSC 262. Semester offered: Spring.

DMAD-176 Digital Image Editing Applications 2 cr.
An application of advanced digital image editing techniques using Adobe Photoshop. Students will use knowledge from previous DMAD 170, DMAD 172, and DMAD 174 in weekly projects that introduce and emphasize the principles of two-dimensional design.

DMAD-200 Intro to Web Design using Dream Weaver 2 cr.
This course is an introduction to web design using the Dreamweaver HTML editor. Students will learn how to create and manage a website and modify content using cascading style sheets. Course also examines how to understand the code that is generated by HTML editing programs.

DMAD-202 Creative Web Design 3 cr.
This course covers aspects of creative web design. Topics include

graphic design, HTML, site management, typography, theory, e-commerce, and web development tools. Projects will be created by identifying a target audience, addressing accessibility issues and adhering to current web design standards.

DMAD-210 Intro to Non-Linear Video 2 cr.
This course is an introduction to digital video editing using Adobe Premiere. Students will learn how to create simple and complex video sequences in a non-linear video editing system. Video projects will be optimized for web, eBook, mobile devices, and DVD distribution.

DMAD-212 Digital Video Production 3 cr.
This hands-on course focuses on the process required to create video compositions. Students will be studying composition, lighting, recording and sound recording techniques, and various script styles. Student teams will work using electronic field production techniques to create numerous projects.

DMAD-220 Intro to Digital Layout and Design 2 cr.
This course is an introduction to digital layout and design using Adobe InDesign. Students will learn how to create multi-column and multi-page layouts in a digital environment. Techniques of type formatting, digital image management, layers, and vector drawing will be explored. Design projects will be optimized for print and web distribution.

DMAD-222 Advanced Digital Layout and Design 3 cr.
This course focuses on creating effective digital layout and design. There is an emphasis on projects that are found in work environments such as creating advertising, promotional, and newsletter materials. The techniques and skills covered can also be applied to creative projects where principles of design and typography are needed. Projects will be optimized for both print and web distribution.

DMAD-230 Intro to Vector Animation 2 cr.
This course is an introduction to vector graphics and two dimensional animation. Students will learn how to use and integrate Flash and Adobe Illustrator to create animations for web delivery. Non-animated vector graphics and illustrations for print and web delivery will also be created.

DMAD-232 Interactive 2D Animation 3 cr.
This hands-on course focuses on the process required to create interactive two dimensional animations for multimedia. Students will create animations using project planning, scriptwriting and storyboard techniques. There is an emphasis on creating animated works that adhere to principles of design and composition.

DMAD-240 3D Design and Animation 3 cr.
This hands-on introductory course focuses on the process required to create 3D graphics and animation. Students will learn concepts of working in 3D space, modeling, image maps and lighting. Animation techniques include working with keyframes and creating jointed hierarchies. Projects will be optimized for web and video delivery.

DMAD-280 Cooperative Education 3 cr.
Supervised cooperative work program. Student is employed in an individualized digital media arts and design field. Student will be supervised and rated by the employer and instructor.

DMAD-284 Digital Media Arts and Design Portfolio 3 cr.
This course is to be taken during the final semester of the DMAD program. Students will use past work created during the course of the DMAD Program as part of developing a professional portfolio and resume to use in entering the digital media and design profession. Discussions will cover aspects of creating and marketing a brand identity to potential employers. Portfolios will be created in areas of specified career paths including video, web and print media.

DMAD-286 Multimedia Project Management 3 cr.
An introduction to project management, as it relates to the design and production of multimedia. Students will work on team and individual projects that focus on creating integrated advertising materials for promotional campaigns. Effective methods for managing large multimedia projects and coordinating efforts with clients and stakeholders will also be covered.

DRAFTING

DRFT-110 Technical Drafting I 3 cr.
The course will comprise a study of the techniques of drafting and the preparation of drawings using traditional drafting methods. Prerequisites: MPE or MATH 095. Semester offered: Fall, Spring.

DRFT-111 Drafting for Industry 3 cr.
The course will comprise a study of the techniques of drafting and the reading and preparation of drawings for craftspeople. The graphic language of industry is covered in the areas of multi-view projection, welding, and machining trades. Semester offered: Spring.

DRFT-112 Materials and Processes 3 cr.
This introductory course in materials science will give the student a basic knowledge of materials and commonly employed processing and manufacturing methods. Semester offered: Spring.

DRFT-113 Materials and Processes Lab 2 cr.
This course will expose the drafting student to the theory and application of commonly employed manufacturing methods through experiences in a shop environment. Corequisite: DRFT 112. Semester offered: Spring.

DRFT-115 Technical Drafting II 4 cr.
This course comprises the use of auxiliary views, geometric tolerancing, threads, fasteners and springs, dimensioning, axonometric projection, oblique projection and perspective drawing in the production of drawings. Prerequisites: DRFT 110 and DRFT 150. Semester offered: Spring.

DRFT-119 Surveying 4 cr.
Elementary plane surveying to include concepts, field work, and computation. Prerequisite: MATH 096 or Accuplacer score of 61 in Algebra. Semester offered: Fall.

DRFT-120 Descriptive Geometry 3 cr.
Descriptive geometry is a study of points, lines and planes in their spatial relationships. Problems in finding their true positions, lengths and shapes are solved by the principles of orthographic projection. Semester offered: Spring.