

TECHNICAL MODELING DESIGN (TMD)

TMD 11003 SOLID MODELING 3 Credit Hours

Instruction given in the best usage approaches for parametric design philosophy through a hands-on, practice-intensive curriculum. Students acquire the knowledge needed to complete the process of designing models from conceptual sketching to solid modeling, assembly design and drawing production with rendering techniques for presentation.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 12000 DIGITAL GRAPHICS 3 Credit Hours

(Equivalent to AGD 12000) Introductory course for creation and editing of both raster and vector 2D graphics. Students learn fundamental design techniques, processes and technical skills for use in various industries for digital and print media.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 12001 TEXTURING AND RENDERING 3 Credit Hours

(Equivalent to AGD 12001) Introduction to the basic concepts of three-dimension modeling, texturing and rendering for design visualization and 3D asset creation for various industries and prototypes. Topics include terminology, techniques of creating textures and imaging for mapping, three-dimension modeling, lighting, shading and rendering.

Prerequisite: TMD 12000 with a minimum C grade; and Technical Modeling Design major.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 22000 TWO-DIMENSION COMMUNICATION 3 Credit Hours

Comprehensive training with 2D and 3D elements of computer-aided-design from the foundation to advanced techniques applicable to design in the graphics, mechanical, industrial and electronics fields.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 22001 MODELING FOR ARCHITECTURE 3 Credit Hours

Introduction to building information modeling (BIM) fundamentals using an industry-standard architectural software application, including creation of full 3D architectural project into working drawings.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 22010 THREE-DIMENSION SCULPTING 3 Credit Hours

(Equivalent AGD 22010) This course explores the technical basics of digital sculpting to create highly-detailed 3D models for use in various industries and product concepts. Students will discover techniques for production workflows for map generation, importing, exporting and utilization of the work created into other applications for stages of the design process or 3D printing.

Prerequisite: Technical Modeling Design major.

Pre/corequisite: TMD 12001.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

TMD 22095 SPECIAL TOPICS IN TECHNICAL MODELING DESIGN 1-3 Credit Hours

(Repeatable for credit) Special topics in technical modeling design. Repeated registration permitted.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 1-3 lecture

Grade Mode: Standard Letter