

Computer Technical Illustration

Description

Provides an opportunity to develop the theory and techniques necessary for employment as a technical illustrator in the fields of engineering, manufacturing, publishing and scientific industries. Students will plan and produce drawings from specific data, blueprints and prototypes. Production methods, visual skills, technical documentation procedures and developments, as they apply to the technical illustration industry, will be studied.

Faculty	Office	Telephone
Farnaz Khoromi	A107B	(619) 388-3527

Career Options

Technical Illustrator, graphic specialist, technical publications specialist, manager technical publications, CAD drafter, CAD illustrator, CAD designer, engineering technician, computer graphics specialist.

Academic Programs

Additional general education and graduation requirements for the associate degree are listed in the catalog. **The associate degree requires a minimum of 60 units.**

Certificate of Completion: Computer Technical Illustration*

Prepares students with drafting and Computer Aided Design (CAD) experience to obtain entry-level Technical Illustration positions.

Courses:	Units
TECI 101, Basic Technical Illustration.....	3
TECI 102, Advanced Technical Illustration.....	3
TEHW 101, Introduction to Technical Writing.....	3
	Total Units = 9

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Achievement: Computer Technical Illustration

Prepares students for entry-level positions in Technical Publications with emphasis on graphic design.

Courses Required for the Major:	Units
TECI 101, Basic Technical Illustration.....	3
TECI 102, Advanced Technical Illustration.....	3
ARTG 120, Illustration	3
ENGL 101, Reading and Composition	3
ENGE 111, Introduction to Computer-Aided Design.....	3
MAFG 102, Print Reading and Symbology	3
MATH 96, Intermediate Algebra and Geometry	5
Total Units = 23	

Associate in Science Degree: Computer Technical Illustration

Prepares students for entry level positions in Technical Illustration, Technical Publications with emphasis in technical illustrating, technical writing and graphic design.

Courses Required for the Major:	Units
TECI 101, Basic Technical Illustration.....	3
TECI 102, Advanced Technical Illustration.....	3
ARTG 120, Illustration	3
ARTG 125, Digital Media.....	3
ENGL 101, Reading and Composition	3
ENGE 111, Introduction to Computer-Aided Design.....	3
MAFG 102, Print Reading and Symbology	3
MATH 96, Intermediate Algebra and Geometry	5
Total Units = 26	

Additional general education and graduation requirements for the associate degree are listed in the catalog. **The associate degree requires a minimum of 60 units.**

Associate in Science Degree: Computer Technical Illustration Engineering Emphasis

Prepares students for entry level positions in Technical Illustration with emphasis in engineering, graphics, engineering design including CAD.

Courses Required for the Major:	Units
TECI 101, Basic Technical Illustration.....	3
TECI 102, Advanced Technical Illustration.....	3
ARTG 120, Illustration	3
ARTG 125, Digital Media.....	3
ENGL 101, Reading and Composition	3

ENGE 111, Introduction to Computer-Aided Design.....	3
ENGE 151, Engineering Drawing.....	2
ENGE 152, Engineering Design	3
ENGE 198, Computer Applications in Engineering	3
MAFG 102, Print Reading and Symbology.....	3
MATH 96, Intermediate Algebra and Geometry	5
Total Units = 34	

Additional general education and graduation requirements for the associate degree are listed in the catalog. **The associate degree requires a minimum of 60 units.**

Recommended electives: Mathematics 104, 116.

Courses

Technical Illustration (TECI)

50 Bridging to Technical Illustration

**1 hour, 1 unit
Grade Only**

This course is designed to assist students in exploring the possibility of pursuing a career in the field of technical illustration. This introductory course, outlines career options within the field, places of employment, overview of the current technology, areas of specialization, testing requirements and professional organizations. (FT) Associate Degree Credit and not Transferable.

101 Basic Technical Illustration

**1.5 hours lecture, 4.5 hours lab, 3 units
Grade Only**

This course covers the basics of technical illustration as it applies to the technical publications industry. Emphasis is placed on visualization skills, technical document analysis, and illustration development. Projects progress from technical illustration of mechanical details on CAD to pictorial procedures as required by industry. (FT) Associate Degree Credit & transfer to CSU and private colleges and universities.

102 Advanced Technical Illustration

**1.5 hours lecture, 4.5 hours lab, 3 units
Grade Only**

Prerequisite: Technical Illustration 101 with a grade of "C" or better, or equivalent.

This course is a continuation of Basic Technical Illustration 101. This course is designed to emphasize advanced pictorial problems of complex mechanical

assemblies as they apply to current technical illustration industrial standards. Projects will progress from CAD generated technical illustrations of exploded views in isometric, wireframe, and solids modes to exploring current procedures of pictorial development as required by industry. (FT) Associate Degree Credit & transfer to CSU and private colleges and universities.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 96. Please refer to the class schedule and/or see the dean or department chair for availability.