Welcome

We are delighted that you’ve expressed an interest in pursuing educational opportunities at Ivy Tech Community College-Lafayette. The Design Technology program represents an exciting field of study that you will find both challenging and rewarding. The Design Technology curriculum provides the opportunity for graduates to be productive immediately upon graduation. Potential employers encompass a wide variety of disciplines including architecture and engineering, consumer products, medical products, durable goods, government and education, and many others. Graduates most often fill positions as computer aided design (CAD) technicians and drafters, design drafters, facilities management technicians, mechanical or architectural drafters, engineering technical assistants, and product designers. The Design Technology curriculum stresses technical rigor to allow the graduate to keep abreast of emerging technologies and applications in the field. The ultimate goal is to prepare the graduate to effectively compete and advance professionally in engineering technology and design disciplines.

We look forward to meeting and assisting you with your educational goals as you advance your college education in preparation for a rewarding technical career. Please contact the the phone number listed on the back of this brochure should you wish further information about the School of Technology or the Design Technology program.

Ivy Tech Community College - Lafayette
Admissions:
888-IVY-LINE
(765-269-5200)
www.ivytech.edu

Design Technology Curriculum and Course Descriptions

Curriculum for Design Technology varies based on the degree or certificate and is subject to change.

Go to www.ivytech.edu/design-technology to find recommended course curriculum and course descriptions.

Ivy Tech Community College
3101 Creasy Lane
Lafayette, IN  49705

Phone (765) 269-5227

For more information email the School of Technology
lafayette-sot@lists.ivytech.edu
Overview
The Design Technology program prepares students for challenging professions in the design disciplines. Students can focus their program of study in Mechanical Design, Architectural Design, Computer Aided Design/ Computer Aided Manufacturing (CAD/CAM), and Computer Graphics. Students have access to the most current hardware and software used in the disciplines. Lab facilities are equipped with high capacity workstations, 3D Printers and the latest in design and modeling software including AutoCAD, Inventor, SolidWorks, ProE, Revit and Adobe Suite The program emphasizes technical rigor and foundation development. Graduates have the skills and knowledge required to respond to future employment challenges or continue their education at other colleges or universities.

Accreditation
The Design Technology program is accredited by The Association of Technology, Management, and Applied Engineering (ATMAE).

Design Technology Degrees
ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE
Two-year Associate of Applied Science degree programs prepare students for careers, career changes and career advancement. AAS programs may also prepare students for transfer to four-year institutions. The program content, which is approximately 30 percent general education, provides depth and breadth in conceptual and professional/technical skills. Professional/technical courses equip students with the skills to obtain employment and to advance in the workforce.

Elective Focus Areas
- Architecture
- Computer Aided Design and Computer Aided Manufacturing (CAD/CAM)
- Mechanical Technology
- Computer Graphics

Computer Aided Design and Computer Aided Manufacturing (CAD/CAM)
The CAD/CAM focus area teaches students to design and document a product as well as to control the automated manufacturing process. The interface between CAD and CAM software tools and processes is explored in depth. Students will be prepared for entry level design positions utilizing computer-aided design and manufacturing software and systems. Students will learn 3D parametric solid part modeling. Emphasis is also placed on the generation of tool path data for control of sophisticated Computer Numerically Controlled (CNC) machine tools. Instruction includes both manual programming methods and leveraged techniques using modern CAM software. Students will program and operate a 3-Axis vertical CNC machining center as well as a CNC turning center.

Mechanical Technology
This focus area prepares students to begin careers in engineering design support. Areas of study include design and manufacturing documentation, 3D parametric solid modeling, and manufacturing processes. Students will learn wireframe, surface, solid and parametric solid 3D modeling, as well as industrial graphics standards.

Computer Graphics
This focus area emphasizes both the technical and aesthetic aspects of design. You will be prepared for careers in creative and technical arenas, which consist of computer illustration, commercial art, and creating artwork for a variety of marketing materials.