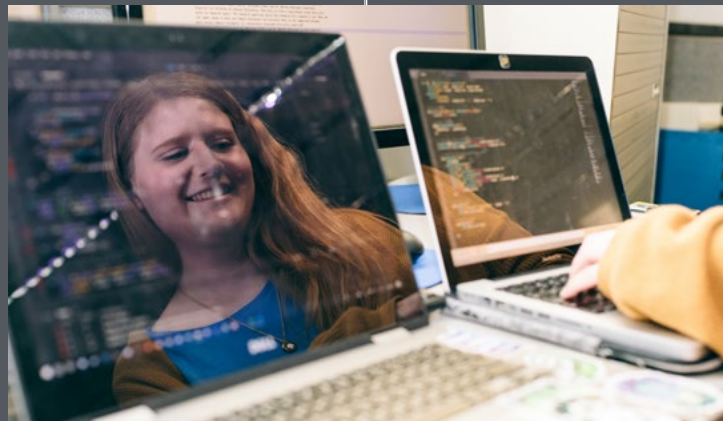# Whether you like to create, design, network or protect, Purdue Polytechnic has a computing major with your name on it!

It takes all types of creativity to solve challenges. The world especially needs those select individuals who can combine their artistic talents with technical abilities!

Purdue Polytechnic has more than a dozen computer-centric majors that range from creative — like the animation and visual effects major — to highly technical, such as the cybersecurity and network engineering technology majors.

Flex your imagination and inventiveness at Purdue Polytechnic. We can help you find the right computer-focused major for your talents!

polytechnic.purdue.edu
techrecruit@purdue.edu

PURDUE UNIVERSITY. | Polytechnic Institute

PURDUE POLYTECHNIC MAJORS IN
COMPUTING AND GRAPHICS

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✉ **techrecruit@purdue.edu**

ANIMATION AND VISUAL EFFECTS

Enhance entertainment and informational videos by combining real and virtual actors and settings. Learn skills in rendering, motion, lighting and texturing.

- 3D modeler
- Technical director
- Visual effects compositor
- Motion graphics compositor

BUILDING INFORMATION MODELING

Use digital models to design the construction of buildings and infrastructure in the architecture, engineering and construction (AEC) industry.

- Building information modeling manager
- Building information modeling designer
- Design engineer
- Animator

COMPUTER AND INFORMATION TECHNOLOGY

Keep your employer's computer systems functioning efficiently and their data safe as you manage information systems, applications, databases and networks.

- Application developer
- Business analyst
- IT consultant
- Network administrator

COMPUTER ENGINEERING TECHNOLOGY

Study programming techniques and learn how embedded microcomputer systems sense their environments to control the systems that contain them.

- Test engineer
- Application engineer
- Systems engineer
- Project engineer

COMPUTING INFRASTRUCTURE AND NETWORK ENGINEERING TECHNOLOGY

Focus on high-level computer network design with a foundation in hardware and software to manage networks and solve networking challenges.

- Network engineer
- Network architect
- Systems engineer
- Network manager

CYBERSECURITY

The demand for cybersecurity professionals is high! Learn to create and maintain secure networks and ways to track down hackers who aim to breach that security.

- Computer security incident responder
- Security analyst
- IT security administrator
- Source code auditor

DATA ANALYTICS, TECHNOLOGIES AND APPLICATIONS (DATA)

Leverage statistical and machine learning techniques by applying and evaluating database analytics approaches, techniques and tools to solve problems.

- Data scientist
- Data analyst
- Data engineer
- Data architect

DATA VISUALIZATION

Learn to communicate technical, scientific, medical and other complex information in easy-to-understand formats, such as graphs and maps.

- Data visualization engineers
- Data analysts
- Digital media data scientists
- Visual designers

DIGITAL ENTERPRISE SYSTEMS

Use computer-aided design (CAD) to build 3D models that demonstrate how products are manufactured, serviced and supported throughout the product lifecycle.

- Technical trainer
- Systems integration specialist
- Applications engineer
- Product lifecycle manager

GAME DEVELOPMENT AND DESIGN

Bring virtual worlds to life in industries that include education, health care, science, research, employee training and, of course, gaming!

- Technical artists
- Game design scripters
- Cinematic leads
- Animation/performance trackers

SYSTEMS ANALYSIS AND DESIGN

Combine business practices with databases, programming and applications to design information systems solutions that help organizations operate efficiently.

- Business analyst
- System architect
- System designer
- System consultant

UX DESIGN

User experience (UX) designers incorporate customer feedback to research end users' needs and brainstorm solutions that help them navigate products and surroundings.

- User experience designers
- User researchers
- Front-end developers
- User interface designers

WEB PROGRAMMING AND DESIGN

Build secure, user-friendly web apps, such as information storage/retrieval programs and financial transactions, using PHP, Microsoft, open source MySQL and ASP environments.

- User interface designers
- Web developers
- Database administrators
- Web architects