Bachelor’s Degree Program

ENGINEERING TECHNOLOGY – COMPUTERS

ABOUT THIS DEGREE PROGRAM

Computer software enables everything from basic functions like email and word processing, to complex programs that drive today’s mobile devices. DeVry University’s bachelor’s degree program in Engineering Technology – Computers can prepare you with the skills for writing, implementing and testing software programs that drive modern electronic devices.

As a student, you can learn programming languages, operating systems environments, microprocessor fundamentals and how to decipher user needs. You can focus on real-world problems and solutions, gaining the experience that today’s employers value.

The Engineering Technology – Computers degree program is accredited by The Engineering Technology Accreditation Commission (ETAC) of the Accreditation Board for Engineering and Technology (ABET). Some courses may be taken interchangeably between onsite and online to fulfill graduation requirements. The most recent information on which programs are ETAC of ABET accredited at which locations is available in the Academic Catalog and at http://www.devry.edu/catalogs, contains the most current and detailed program information, including admission, progression and graduation requirements. Information contained herein is effective as of date of publishing.

ACREDITATION MATTERS

The Engineering Technology – Computers (ET-C) degree program is accredited, by location, by The Engineering Technology Accreditation Commission of ABET (ETAC of ABET) www.abet.org. ETAC of ABET promotes technical education excellence by offering programmatic accreditation to Institutions that meet their quality standards. This is a global mark of quality that is valued by employers and professional associations within the field of Engineering Technology. To learn more visit www.abet.org.

Through our TechPath approach, we’ve put technology at the core of our programs in business, tech and health – including this program. Every TechPath class you take revolves around a unique learning rubric developed at DeVry. We call it People-Process-Data-Devices or P2D2. You’ll gain real skills in collaboration, be able to adapt to new structures, and be comfortable working with data and a wide spectrum of tech-forward tools. P2D2 is a key component of what makes TechPath a smart, new way of getting the knowledge you need to be ready to hit the ground running in the way successful companies work today.

Courses in blue are part of the DeVry Tech Path

GENERAL EDUCATION COURSEWORK

Communication Skills
- ENGL120 Composition
- ENGL135 Advanced Composition
- ENGL216 Technical Writing
- SPCH275 Public Speaking

Humanities
- HUMN303 Introduction to the Humanities
- ETHC445 Principles of Ethics
- LAS432 Technology, Society, and Culture

Social Sciences
- ECON312 Principles of Economics
- SOCS185 Culture and Society
- SOCS325 Environmental Sociology

Mathematics, Analytical Methods and Natural Sciences
- ECET345 Signals and Systems with Lab
- MATH190 Pre-Calculus
- MATH260 Applied Calculus I
- MATH270 Applied Calculus II
- PHYS310 College Physics I with Lab
- PHYS320 College Physics II with Lab

Personal and Professional Development
- CARD405 Career Development
- COLL448 Critical Thinking and Problem-Solving

ENGINEERING TECHNOLOGY – COMPUTERS

CORE-DEGREE COURSEWORK

Electronic Circuits and Devices
- ECET110 Electronic Circuits and Devices I with Lab
- ECET210 Electronic Circuits and Devices II with Lab
- ECET220 Electronic Circuits and Devices III with Lab
- ECET350 Signal Processing with Lab

Digital Circuits and Microprocessors
- CEIS100 Introduction to Engineering Technology and Information Sciences
- ECET105 Digital Fundamentals with Lab
- ECET230 Digital Circuits and Systems with Lab
- ECET330 Microprocessor Architecture with Lab
- ECET340 Microprocessor Interfacing with Lab
- ECET365 Embedded Microprocessor Systems with Lab

Computer Programming and Networking
- CEIS205 Data Structures and Algorithms
- CIS170C Programming with Lab
- CIS247C Object-Oriented Programming with Lab
- CIS336 Introduction to Database with Lab
- CIS35A Business Application Programming with Lab
- ECET360 Operating Systems with Lab
- ECET375 Data Communications and Networking with Lab
- ECET465 Advanced Networks with Lab
- ECET490 Distributed Computing System Design with Lab

Technology Integration
- ECET209 Technology Integration I
- ECET497 Technology Integration II
Bachelor’s Degree Program
Engineering Technology – Computers

CAREERS IN COMPUTER ENGINEERING TECHNOLOGY

The field of engineering technology has changed the way we live, play and work. It's difficult to imagine our world without cell phones, electronic gaming and the Internet.

DeVry University’s Engineering Technology – Computers degree program provides students a broad range of applicable coursework, including programming, microprocessors, operating systems, product development, database system design and technology integration.

Graduates of DeVry University’s Engineering Technology – Computers program may consider careers including, but not limited to, the following:

- Application Engineer
- Computer Automated Teller and Office Machine Technician
- Computer Support Specialist
- Customer Service Engineer
- Electrical Engineering Technician
- Electronic Technician
- Electronics Engineering Technician
- Engineering Specialist
- Engineering Technician
- Field Service Technician
- Manufacturing Technician
- Sales Engineer
- Test Engineer

For comprehensive consumer information, visit devry.edu/studentconsumerinfo.

Important information about the education debt, earnings and completion rates of students who attended this program can be found at devry.edu/bcet-ge.

For additional program information, visit devry.edu/bcet.

In New York, DeVry University operates as DeVry College of New York.


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KNOWLEDGE AND SKILLS

MICROPROCESSOR ARCHITECTURE — Explore the internal architecture of the microprocessor, the basic building block of current electronic systems. Use assembly language and/or high-level language to program the microprocessor and develop simple algorithms.

DATA COMMUNICATIONS AND NETWORKING — Learn principles of data communications, including noise effects, multiplexing and transmission methods, as well as the protocols, architecture and performance analysis of local and wide area networks.

OPERATING SYSTEMS — Explore basic operating system concepts such as process states and synchronization, multiprocessing, multiprogramming, processor scheduling, virtual memory, logical and physical input/output, device allocation and file management.

DATABASE FUNDAMENTALS — Concepts and methods fundamental to database development are developed including data analysis and modeling, as well as structured query language (SQL). Explore basic functions and features of a database management system (DBMS), with emphasis on the relational model.

BUSINESS APPLICATION PROGRAMMING — Programming and database skills to develop programs that support typical business processing activities and needs such as transaction processing and report generation. Business-oriented programs are developed that deal with error handling, data validation and file handling. Java is the primary programming language used.

COMPUTERS AND ELECTRONICS — Understand circuit boards, processors, chips, electronic equipment and computer hardware and software, including applications and programming.

QUALITY CONTROL ANALYSIS — Conduct tests and inspections of products, services or processes to evaluate quality or performance.

COMPLEX PROBLEM SOLVING — Identify complex problems and review related information to develop and evaluate options and implement solutions.

MATHEMATICS — Understand and apply arithmetic, algebra, geometry, calculus and statistics.