OLIVET NAZARENE UNIVERSITY

Engineering Department

B.S. Engineering, Computer Concentration

Accredited ABET Engineering Accreditation Commission

Computer Engineering Concentration

Available as accredited Bachelor of Science in Engineering Major (B.S.E degree) with Computer Engineering concentration

What do cell phones, digital audio players, tablet PCs, satellites, x-ray machines and laser surgical tools have in common? All are the result of the work of computer engineers.

With the continued expansion of computer-based products, Olivet's computer engineering graduates can be found in a wide variety of dynamic companies, working on a myriad of technology-based products and services. As an Engineering graduate with a Computer Engineering concentration, you will enter a field characterized by high demand for talented systems and applications programmers, hardware and firmware designers, network managers and enterprise consultants.

As an Olivet Engineering student, you can:

- Study contemporary and relevant topics within the computer engineering field.
- Learn from experienced professionals.
- Gain hands-on experience through Olivet's IT help desk, assisting students, faculty and staff.
- Gain focused laboratory experience in the integration of hardware and embedded software.
- Benefit from small class sizes and flexible access to Engineering and Computer Science faculty.
- Be part of a technology mission team to directly assist people in developing nations.
- Tap into a large engineering alumni network with opportunities for great summer internships.
- Participate in a Capstone Senior Engineering design project.

Students who have elected the Computer Engineering concentration benefit from the best of both the Engineering and Computer Science departments, providing maximum exposure to the key elements required for the computer engineering field. And as with all Olivet programs, the Computer Engineering concentration has a focus on Christian ethics.

Through this program, you will learn the key technical skills desired by employers in this field including: programming; problem solving; creating user interfaces; microcontroller programming, creating tools and tools support; building and administering database management systems.

You will also learn the professional skills you need to succeed on the job, such as: written communication, oral presentation techniques, teamwork, understanding of different cultures and organizing information.

Careers

Possible career fields for Engineering (Computer Engineering concentration) include: automation (working together with electrical and mechanical engineers), software design, design of computing platforms, software development for engineering applications, interfacing of hardware and software, wireless communication, embedded programming, and website/UI development, among many others.

Olivet's Department of Engineering is within the School of Professional Studies.

For more information visit:
www.olivet.edu/academics/computer-engineering/

Or check us out on:

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Recommended Course Sequence for Computer Engineering Concentration

Freshmen Starting in the Fall Semester

Freshman Year

Fall Semester - 18 hours	*Spring Semester - 18 hours*
3 ENGN 101 - Engineering Design I	3 ENGN 102 - Engineering Design II
4 CSIS 251 - Principles of Programming I †	3 CSIS 252 - Principles of Programming II
4 MATH 147 - Calculus I	4 MATH 148 - Calculus II
3 ENGL 109 - College Writing I	5 PHYS 201 - General Physics I
3 THEO 101 - Christian Formation	3 FINA 101 - Intro to Fine Arts
1 GNST 110 - Fr. Seminar: Connections	

Sophomore Year

Fall Semester - 16 hours	*Spring Semester - 18 hours*
3 ENGN 270 - Digital Systems	3 ENGN 300 - Electrical Circuit Analysis
4 CSIS 326 - Network Administration	3 MATH 357 - Differential Equations
4 MATH 261 - Calculus III	3 COMM 105 - Fund. of Communication
5 PHYS 202 - General Physics II	3 PHED 190 - Wellness
	3 ECON 110 - Principles of Economics **
	3 BLIT 202 - Christian Scriptures I

Junior Year

Fall Semester - 18 hours	*Spring Semester - 18 hours*
3 ENGN 310 - Circuits & Signal Processing	3 ENGN 335 - Technical Communications
3 CSIS 381 - Systems Programming	4 BIOL 125 - Biology I ††
3 ENGN 457 - Software Engineering	4 MATH 241 - Statistics
3 ENGN 340 - Digital Electronic Circuits	3 International Culture Course
3 BLIT 303 - Christian Scriptures II	4 CHEM 103 – General Chemistry I
3 International Culture Course	

Senior Year

Fall Semester - 15 hours	*Spring Semester - 16 hours*
2 ENGN 481 - Senior Design Project I	2 ENGN 482 - Senior Design Project II
3 HIST 200 - Western Civilization	4 ENGN 311 – Communications Systems
3 MATH 311 - Discrete Math	4 CSIS 366 - Computer Org. & Design
3 LIT 205 - Studies in Literature	3 THEO 404 - Christian Faith
4 ENGN 380 - Thermodynamics	3 ENGN 250 - Engineering Economics

** PSCI 101, PSCI 223, PSYC 101, or SOCY 120 may substitute for ECON 110.
† ENGN 171 can be substituted for CSIS 251.
†† BIOL 201 (3 credit hours) may substitute for BIOL 125.