Ternopil State Ivan Pul'uj Technical University
Bachelor of Computer Sciences
Four Year Degree Programme

CURRICULUM

First semester

1. Higher mathematics-1
2. Physics-1
3. Engineering and Computer Graphics-1
4. Fundamentals of programming and algorithmic languages
5. Ecology
7. Law Fundamentals
8. Ukrainian and world culture
   Ukrainian and English languages

Second semester

1. Principles of Economics
2. Higher mathematics-2
3. Physics-2
4. Fundamentals of discrete mathematics (Discrete Mathematics)
5. Fundamentals of programming and algorithmic languages-2
6. History of Ukraine
7. Philosophy and religious studies
   Ukrainian and English languages

Third semester

1. Computer Oriented Statistical & Optimization Methods
2. Higher mathematics-3
3. Physics-3
4. Object Oriented Programming and C++-1
5. Fundamentals of Electrical Engineering and Electronics
6. Probability theory, probability process and mathematical statistics-1
   Ukrainian and English languages

Fourth semester

1. Probability theory, probability process and mathematical statistics-2
2. Digital Electronics and Computer Organization
3. Numerical computing (methods)
4. Object Oriented Programming and C++-2
5. Principles of Management
6. Project Work
   Ukrainian and English languages
Fifth semester
1. Political studies
2. Computer Communication Networks (Project Work)
3. Signal and image processing-1
4. Technical Documentations, Presentation & Communication Skills
5. Software Engineering
6. Fundamentals of marketing
7. Reliability, monitoring, diagnostics and maintenance of computers (elective)

Sixth semester
1. Fundamentals of psychology and pedagogy (Industrial psychology)
2. Sociology
3. Database Management System
5. CAD software-1
6. Computer Architecture -1
7. Signal and image processing-2

Seventh semester
1. Fundamentals of system analysis of objects and processes of computerization-1
2. System programming and operating systems
3. Methods and facilities of computer informational technologies
4. Fundamentals of artificial intelligence system design
5. Fundamentals of computer-aided design and system integration of computer informational technologies
7. Client Server Technology

Eighth semester
1. Fundamentals of system analysis of objects and processes of computerization-2
2. System programming and operating systems
3. Methods and facilities of computer informational technologies
4. Fundamentals of computer-aided design and system integration of computer informational technologies
5. System simulation (design) (выборочная часть)
6. Information Systems: Analysis, Design and Implementation
7. Multimedia and Its Applications