



VILNIUS COLLEGE OF TECHNOLOGIES
AND DESIGN

Information Systems Engineering

State code: 6531BX011

Study field: Computer Engineering

Study mode and scope of the study programme: Full-time studies - 3 years,
Part-time studies - 4 years.

The student will be able:

- to design, programme, install, improve and update computerized information systems;
- to install and administer computer networks and operating systems;
- to create and administer databases and websites;
- to apply information systems security principles;
- to work in a team and make decisions independently;
- to work successfully in competitive market conditions and develop in a professional field.

The student will:

- work as a system analyst, programmer, database administrator, user interface developer, computer network administrator in various companies and organizations;
- work as a manager and executor of IT projects.

| SUBJECT TITLE | ECTS CREDITS | ASSESSMENT |
|---|--------------|------------|
| Semester I (30 Credits) | | |
| Speciality Language Culture | 3 | D |
| Mathematics | 6 | E |
| Physics of Computer | 6 | E |
| Applied Programmes | 3 | D |
| Engineering Graphics | 6 | D |
| <i>Choice (choose one):</i> | | |
| Foreign Language (English) | 3 | D |
| Foreign Language (French) | 3 | D |
| Foreign Language (Russian) | 3 | D |
| Foreign Language (German) | 3 | D |
| <i>Optional study subjects</i> | | |
| Sociology | 3 | E |
| Sustainable Development | 3 | E |
| Psychology | 3 | E |
| Semester II (30 Credits) | | |
| Programming | 6 | D |
| Probability theory and statistics | 3 | E |
| Electronics and Electrical Engineering | 6 | E |
| Operations Systems | 6 | E |
| Technological 1 Practice | 6 | D |
| <i>Choice (choose one):</i> | | |
| Foreign Language (English) | 3 | E |
| Foreign Language (French) | 3 | E |
| Foreign Language (Russian) | 3 | E |
| Foreign Language (German) | 3 | E |
| Semester III (30 Credits) | | |
| Sustainable Environment and Occupational Safety | 3 | E |
| Software Engineering | 3 | E |
| Computers' Architecture | 3 | E |
| Information Systems Design | 6 | D |
| Discrete Mathematics | 6 | E |
| Production Practice 1 | 6 | D |
| <i>Choice (choose one):</i> | | |
| Logistics System | 3 | D |
| Science Workshop Project | 3 | D |
| Programming in Python | 3 | D |
| Semester IV (30 Credits) | | |
| Database Management Systems | 6 | D |
| Computers Networks | 3 | E |
| Data Structures and Algorithms | 6 | E |
| Digital Device Programmin | 3 | E |
| Applied Research | 3 | D |
| Production Practice 2 | 6 | D |
| <i>Choice (choose one):</i> | | |
| Information Systems Installation and Support | 3 | D |
| Interdisciplinary Project | 3 | D |
| Computer Design | 3 | D |

| Semester V (30 Credits) | | |
|------------------------------------|----|---|
| Internet Technologies | 6 | D |
| Human and Computer Interacion | 3 | E |
| Development of Mobile Applications | 3 | E |
| Information Systems Security | 6 | E |
| Project Management | 3 | D |
| Engineering Economics | 3 | D |
| Technological 2 Practice | 6 | D |
| Semester VI (30 Credits) | | |
| Engineering Economics | 3 | E |
| Law | 3 | E |
| IT Business Information Systems | 3 | E |
| Final Practice | 6 | D |
| Final Thesis | 12 | D |
| <i>Choice (choose one):</i> | | |
| Cloud Computing | 3 | D |
| Visual and Security Systems | 3 | D |
| Data Visualization Systems | 3 | D |

E - Exam

D - Independet work