

Graduation requirements for students whose first semester start at or after Fall 2014 are as follows:

1. 176,5 ECTS core courses listed below.
2. At least 6 elective courses. Total credits for these courses must be at least 18,5 ECTS. One of these courses must be 2-ECTS course. Other 2-ECTS courses (except Cultural Activities) are not counted for credits but GPA.
3. At least 10 area elective courses. Total credits for these courses must be at least 45 ECTS. Students cannot register to these courses before their fifth semester.
4. Total credits must be at least 240 ECTS.
5. All registered courses must be offered in English. If an elective course is not offered in English, you can register it in Turkish.

Undergraduate curriculum for the students whose 1st semester will start at or after Fall 2014

I. Semester

| Code | Course Name | T | L | E |
|----------------------|------------------------|---|---|-------------|
| MAT805 | Calculus I | 5 | 2 | 7,5 |
| KIM113 | General Chemistry | 4 | 0 | 6,0 |
| FIZ105 | Physics I | 4 | 0 | 6,0 |
| FIZ107 | Physics Laboratory I | 0 | 2 | 1,5 |
| BIM101 | Computer Programming I | 3 | 2 | 7,0 |
| TUR125 | Turkish Language I | 2 | 0 | 2,0 |
| Total Credits | | | | 30,0 |

II. Semester

| Code | Course Name | T | L | E |
|----------------------|-----------------------------------|---|---|-------------|
| MAT806 | Calculus II | 5 | 2 | 7,5 |
| FIZ106 | Physics II | 4 | 0 | 6,0 |
| FIZ108 | Physics Laboratory II | 0 | 2 | 1,5 |
| BIM122 | Discrete Computational Structures | 3 | 0 | 5,0 |
| BIM102 | Computer Programming II | 3 | 0 | 6,0 |
| TUR126 | Turkish Language II | 2 | 0 | 2,0 |
| | Elective Course (1) | 2 | 0 | 2,0 |
| Total Credits | | | | 30,0 |

III. Semester

| Code | Course Name | T | L | E |
|----------------------|--|---|---|-------------|
| BIM211 | Visual Programming | 2 | 2 | 6,0 |
| BIM213 | Data Structures and Algorithms | 2 | 2 | 5,5 |
| BIM203 | Logic Design | 4 | 0 | 6,0 |
| BIM201 | System Software | 3 | 0 | 6,0 |
| MAT251 | Linear Algebra | 3 | 0 | 4,5 |
| TAR165 | Ataturk's Principles and History of Turkish Revolution I | 2 | 0 | 2,0 |
| Total Credits | | | | 30,0 |

IV. Semester

| Code | Course Name | T | L | E |
|----------------------|---|---|---|-------------|
| MAT219 | Differential Equations | 2 | 2 | 4,5 |
| BIM224 | Object-Oriented Programming | 3 | 0 | 5,5 |
| BIM222 | Internet Programming | 3 | 0 | 4,5 |
| BIM312 | Database Management Systems | 3 | 0 | 6,0 |
| BIM314 | Theory of Computation | 3 | 0 | 4,5 |
| IST201 | Statistics | 3 | 0 | 3,0 |
| TAR166 | Ataturk's Principles and History of Turkish Revolution II | 2 | 0 | 2,0 |
| Total Credits | | | | 30,0 |

V. Semester

| Code | Course Name | T | L | E |
|--------|---------------------------------|---|---|-----|
| BIM311 | Systems Analysis and Design | 3 | 0 | 4,5 |
| BIM313 | Advanced Programming Techniques | 3 | 2 | 6,0 |
| BIM303 | Microcomputers | 3 | 2 | 7,0 |
| BIM305 | Computer Organization | 3 | 0 | 5,0 |
| | Area Elective Course (1) | 3 | 0 | 4,5 |
| | Elective Course (1) | 3 | 0 | 3,0 |

VI. Semester

| Code | Course Name | T | L | E |
|--------|---------------------------|---|---|-----|
| BIM302 | Computer Networks | 3 | 0 | 4,5 |
| BIM304 | Computer Algorithm Design | 3 | 0 | 6,0 |
| BIM306 | Operating Systems | 3 | 2 | 4,5 |
| BIM308 | Web Server Programming | 3 | 0 | 6,0 |
| | Area Elective Course (1) | 3 | 0 | 4,5 |
| | Elective Course (1) | 3 | 0 | 4,5 |

| | |
|----------------------|-------------|
| Total Credits | 30,0 |
|----------------------|-------------|

| VII. Semester | | | | |
|----------------------|-----------------------------|----------|----------|-------------|
| Code | Course Name | T | L | E |
| BIM437 | Computer Engineering Design | 1 | 2 | 6,0 |
| | Area Elective Course (4) | | | 18,0 |
| | Elective Course (2) | | | 6,0 |
| Total Credits | | | | 30,0 |

| | |
|----------------------|-------------|
| Total Credits | 30,0 |
|----------------------|-------------|

| VIII. Semester | | | | |
|-----------------------|-----------------------------------|----------|----------|-------------|
| Code | Course Name | T | L | E |
| BIM444 | Computer Engineering Applications | 0 | 4 | 9,0 |
| | Area Elective Course (4) | | | 18,0 |
| | Elective Course (1) | | | 3,0 |
| Total Credits | | | | 30,0 |

Area Elective Courses

| | | | | |
|--------|-------------------------------|---|---|-----|
| BIM309 | Artificial Intelligence | 3 | 0 | 4,5 |
| BIM405 | Project Management | 3 | 0 | 4,5 |
| BIM423 | Software Engineering | 3 | 2 | 6,0 |
| BIM439 | Applications of DBMS | 3 | 0 | 4,5 |
| BIM441 | Introduction to Rough Sets | 3 | 0 | 4,5 |
| BIM446 | Analysis of Algorithms | 3 | 0 | 4,5 |
| BIM448 | Computer Graphics | 3 | 0 | 4,5 |
| BIM450 | Network Management | 3 | 0 | 4,5 |
| BIM452 | Multimedia Computing | 3 | 0 | 4,5 |
| BIM454 | Programming Language Concepts | 3 | 0 | 4,5 |
| BIM456 | Network Security Principles | 3 | 0 | 4,5 |
| BIM458 | Simulation and Modelling | 3 | 0 | 4,5 |
| BIM460 | Software Modelling | 3 | 0 | 4,5 |
| BIM462 | Parallel Systems | 3 | 0 | 4,5 |
| BIM464 | Human-Computer Interaction | 3 | 0 | 4,5 |
| BIM466 | Fuzzy Logic | 3 | 0 | 4,5 |

| | | | | |
|--------|---------------------------------------|---|---|-----|
| BIM468 | Computer Aided Design | 3 | 0 | 4,5 |
| BIM470 | Neural Networks | 3 | 0 | 4,5 |
| BIM472 | Image Processing | 3 | 0 | 4,5 |
| BIM474 | Introduction to Cryptography | 3 | 0 | 4,5 |
| BIM476 | Data Acquisition and Processing | 3 | 0 | 4,5 |
| BIM478 | Management Information Systems | 3 | 0 | 4,5 |
| BIM480 | Compiler Design | 3 | 0 | 4,5 |
| BIM482 | Network Programming | 3 | 0 | 4,5 |
| BIM484 | Distributed Systems | 3 | 0 | 4,5 |
| BIM485 | Research in Computer Science I | 3 | 0 | 4,5 |
| BIM486 | Research in Computer Science II | 3 | 0 | 4,5 |
| BIM488 | Introduction to Pattern Recognition | 3 | 0 | 4,5 |
| BIM490 | Introduction to Information Retrieval | 3 | 0 | 4,5 |
| BIM492 | Design Patterns | 3 | 0 | 4,5 |
| BIM493 | Mobile Programming I | 3 | 0 | 4,5 |
| BIM494 | Mobile Programming II | 3 | 0 | 4,5 |
| EEM305 | Signals and Systems | 3 | 0 | 4,5 |
| EEM334 | Digital Systems II | 3 | 0 | 4,5 |

Elective Courses

| | | | | |
|--------|---------------------------------------|---|---|-----|
| ARK108 | Archaeology | 2 | 0 | 2,0 |
| MUZ151 | History of Music | 2 | 0 | 2,0 |
| SNT155 | History of Art | 2 | 0 | 2,0 |
| ILT201 | Interpersonal Communication | 3 | 0 | 3,0 |
| ISN309 | Mass Media | 3 | 0 | 3,0 |
| ISL423 | Entrepreneurship and Venture Creation | 3 | 0 | 3,0 |
| THU203 | Community Services | 0 | 2 | 3,0 |
| IKT151 | Economics | 3 | 0 | 3,0 |
| ISL101 | Introduction to Business | 3 | 0 | 4,5 |

| | | | | |
|--------|-------------------------------|---|---|-----|
| BEO155 | Physical Education | 2 | 0 | 2,0 |
| MUZ157 | Traditional Turkish Art Music | 2 | 0 | 2,0 |
| KUL199 | Cultural Activities | 0 | 2 | 2,0 |
| TIY121 | Introduction to Theatre | 2 | 0 | 3,0 |
| BIM411 | Decision Support Systems | 3 | 0 | 3,0 |
| PZL302 | Marketing Management | 3 | 0 | 4,5 |
| ISL301 | Human Resources Management | 3 | 0 | 4,0 |
| NUM301 | Numerical Methods | 3 | 0 | 3,5 |
| MUH151 | Introduction to Accounting | 3 | 0 | 4,5 |
| IKT356 | Engineering Economics | 3 | 0 | 4,5 |

Abbreviations: T=Theory hours/week | L=Laboratory hours/week | E=ECTS credits