

DOUBLE MAJOR IN FOOD ENGINEERING - GENERAL

First Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|-------------------------------|-----------|----------|-----------|-----------|
| CHM104 | CHEMISTRY FOR BIOLOGICAL SCI. | 3 | 2 | 4 | 5 |
| ECC107 | BIOLOGY | 3 | 0 | 2 | 3 |
| ING101 | ENGLISH I | 4 | 0 | 3 | 3 |
| MTH101 | MATHEMATICS I | 4 | 0 | 4 | 5 |
| PHY101 | PHYSICS I | 4 | 2 | 4 | 6 |
| FDE101 | INTRODUCTION TO FOOD ENG. | 3 | 0 | 1 | 5 |
| | | | | | |
| | | | | | |
| TOTAL | | 21 | 4 | 18 | 27 |

Second Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|-----------------------|-----------|----------|-----------|-----------|
| CHM122 | ORGANIC CHEMISTRY | 4 | 2 | 3 | 6 |
| ENG102 | ENGLISH II | 0 | 0 | 3 | 3 |
| MTH102 | MATHEMATICS II | 4 | 0 | 4 | 6 |
| ECC016 | INT. TO COMP. & PROG. | 3 | 0 | 3 | 6 |
| PHY102 | PHYSICS II | 4 | 2 | 4 | 6 |
| TD102 | TECHNICAL DRAWING | 3 | 0 | 3 | 3 |
| | | | | | |
| | | | | | |
| TOTAL | | 18 | 4 | 20 | 30 |

Third Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|-------------------------------|-----------|----------|-----------|-----------|
| FDE201 | MASS & ENERGY BALANCES | 4 | 0 | 3 | 6 |
| ECC217 | MICROBIOLOGY | 4 | 2 | 3 | 5 |
| FDE205 | BIOCHEMISTRY | 4 | 2 | 3 | 5 |
| ENG201 | WRITING TECH. IN ACA. ENGLISH | 4 | 0 | 3 | 3 |
| MTH201 | DIFFERENTIAL EQUATIONS | 4 | 0 | 4 | 6 |
| RNTE | RESTRICTED NON-TECH. ELEC. | 3 | 0 | 3 | 5 |
| | | | | | |
| | | | | | |
| TOTAL | | 23 | 4 | 19 | 30 |

Fourth Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|-----------------------|-----------|----------|-----------|-----------|
| FDE202 | THERMODYNAMICS | 4 | 0 | 4 | 6 |
| FDE206 | FOOD MICROBIOLOGY | 4 | 1 | 4 | 4 |
| FDE212 | FOOD ENG. UNIT OP. I | 4 | 2 | 4 | 6 |
| CHM212 | ANALYTICAL CHEMISTRY | 3 | 2 | 3 | 5 |
| FDE214 | ENGINEERING MATERIALS | 3 | 2 | 3 | 4 |
| NTE | NON-TECH. ELEC. | 3 | 0 | 3 | 5 |
| | | | | | |
| | | | | | |
| TOTAL | | 21 | 7 | 21 | 30 |

Fifth Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|--------------------------|-----------|----------|-----------|-----------|
| FDE300 | SUMMER PRACTICE I | 0 | 0 | 0 | 2 |
| FDE301 | INSTRUMENTAL ANALYSIS | 4 | 2 | 3 | 6 |
| FDE303 | FOOD CHEMISTRY I | 4 | 0 | 3 | 6 |
| FDE311 | FOOD ENG. UNIT OP. II | 4 | 0 | 4 | 6 |
| MTH251 | PROBABILITY & STATISTICS | 4 | 0 | 3 | 6 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 2 | 4 |
| | | | | | |
| | | | | | |
| TOTAL | | 19 | 2 | 15 | 30 |

Sixth Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|----------------------------|-----------|----------|-----------|-----------|
| FDE302 | FOOD ANALYSIS | 4 | 2 | 3 | 5 |
| FDE304 | FOOD CHEMISTRY II | 4 | 0 | 3 | 5 |
| FDE306 | F.E. APPLIED KINETICS | 4 | 0 | 3 | 5 |
| FDE312 | FOOD ENG. UNIT OP. III | 4 | 0 | 4 | 6 |
| RNTE | RESTRICTED NON-TECH. ELEC. | 3 | 0 | 3 | 5 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 2 | 4 |
| | | | | | |
| | | | | | |
| TOTAL | | 22 | 2 | 18 | 30 |

Seventh Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|--------------------|-----------|----------|-----------|-----------|
| FDE400 | SUMMER PRACTICE II | 0 | 0 | 0 | 2 |
| FDE401 | FOOD ENG. DESIGN I | 4 | 0 | 3 | 5 |
| FDE403 | PROCESS CONTROL | 4 | 0 | 3 | 5 |
| FDE407 | FOOD PACKAGING | 4 | 0 | 2 | 3 |
| FDE411 | FOOD TECHNOLOGY | 4 | 0 | 3 | 5 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 3 | 5 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 3 | 5 |
| | | | | | |
| TOTAL | | 22 | 0 | 17 | 30 |

Eighth Semester

| Course Code | Course Name | C | L/P | C | ECTS |
|--------------|-------------------------|-----------|----------|-----------|-----------|
| FDE402 | FOOD ENG. DESIGN II | 4 | 0 | 3 | 7 |
| FDE404 | QUALITY CONTROL IN F.E. | 4 | 0 | 3 | 7 |
| FDE412 | FOOD ENG. UNIT OP. LAB. | 4 | 2 | 3 | 6 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 3 | 5 |
| TE | TECHNICAL ELECTIVE | 3 | 0 | 3 | 5 |
| | | | | | |
| | | | | | |
| TOTAL | | 18 | 2 | 15 | 30 |

| TOTAL | Contact Hs | Lab/Practice Hs | Credit | ECTS |
|-------|------------|-----------------|--------|------|
| | | 164 | 25 | 143 |

