

## **Master's Degree Programme in Biotechnology**

### **General Information**

The department of Biotechnology started its MSc programme in 2016-2017.

There are 2 professors, 5 associate professors and 1 assistant professors in the department. The Department of Biotechnology conducts prestigious academic and scientific studies in the field and offers a competent education with its dynamic, innovative and young academic staff conducting various scientific projects supported by both The Scientific and Technology Research Council (TUBITAK) of Turkey and University of Niğde Ömer Halisdemir Research Center.

Department of Biotechnology has the capacity to provide support to work appropriate to current technology with the laboratories and equipment used for research and appliance purposes by students and academics.

Through the Master of Science programme, students develop skills to participate in scientific activities, and share the results with scientific community and they may continue their academic career by enrolling in related Ph.D. programs of the universities in Turkey or abroad. MSc students will make a significant contribution to all areas related to academic life and Biotechnology.

### **Aims and Objectives**

#### **Aims:**

To train and provide the students with recent developments and information on health, agriculture, environmental protection, food production, energy production in to takes place research and development of biotechnology as public institutions and the private sector.

#### **Objectives:**

To encourage students to conduct research and development studies in the fundamental areas of Biotechnology at the international and national areas.

To develop scientific thinking and create projects that will enhance technological Development

To donate students with the scientific thinking skills, is to train scientists which are entrepreneur, innovative and devoted to ethical values.

### **Qualification Awarded**

Students who successfully complete the program will receive Master of Science Degree in BIOTECHNOLOGY.

### **Level of Qualification**

Master's Degree with thesis in BIOTECHNOLOGY is a two-year (4 semesters) program with 120 ECTS credits. The program meets the requirements both for ECTS credits and level descriptors of the "Second Cycle" degree qualifications of "[the Overarching Framework of European Qualifications Framework HE \(QF-EHEA\)](#)" and the "7th Level" qualifications of "[the Turkish Qualifications Framework for HE \(TYYC, NQF-HETR\)](#)", as well as the "7th Level" requirements of the qualifications of "[the European Qualifications Framework for Lifelong Learning \(EQF-LLL\)](#)" in terms of the level descriptors.

## **Specific Admission Requirements**

Admission requirements are determined in line with the regulations set by Higher Education Council of Turkey. Information on application for graduate programs and access requirements are announced on the web page of the university at the beginning of each academic year.

The following requirements are applied for both national and foreign students:

- To be taken any First Cycle (BSc) degree.
- To have ALES (Entrance Exam for Academic Personnel and Postgraduate Education) with minimum score of 60 (or equivalent GRE point)
- The candidates with a Bachelor's Degree from abroad must have the certificate of equivalence from the Council of Higher Education (YOK).
- ALES score is valid for 3 years; however, after master degree is completed or the master program is ended by itself, a new ALES point for the candidates who want to apply Master program maximum one semester later is not required.
- If the graduate score is submitted with respect to 4-point system, this score must be translated to 100-point system according to the score translation table prepared by the Council of Higher Education (YOK).

For further and detailed information please visit [General Admission Requirements and Registration Procedures](#) in the menu items of the Information on the Institution.

For further information on the admission requirement for foreign students, please contact to *University of Niğde Ömer Halisdemir International Office*.

### **Contact:**

International Office

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## **Specific Arrangements for Recognition of Prior Learning**

With an understanding of lifelong learning, University of Ömer Halisdemir recognizes the previously taken courses in another institution and exempt them from graduation credit, as long as the courses match with the learning outcomes of the registered Master's Degree (Second Cycle) programme in Biotechnology at University of Ömer Halisdemir.

## **Profile of the Program**

BIOTECHNOLOGY MASTER'S DEGREE PROGRAM was established on the basis to face the world's health and environmental problems, work to bring solutions to the sustainability of natural resources and ecosystems and development of the industrial sector regarding that are effective in increasing social welfare. Therefore, are needed the presence and upbringing of manpower which sufficiently trained in the biotechnology field that can bring together different disciplines to produce ideas and reveal innovative projects. Students improve their skills to get to participate in scientific activities and share the results with their scientific community. Students can continue their academic careers via enroll in a related PhD program in Turkey or abroad.

BIOTECHNOLOGY MASTER'S DEGREE PROGRAM (Bologna Process, Higher Education Qualifications Framework in the Second Cycle, and "7 Level" in TYÇ) is an academically-oriented master's degree programmes with or without thesis gives the competence to graduates transfer to the field of their professional applications, researchs and doctoral programs that require advanced knowledge, skill and competence. The program can be classified in regards to "[ISCED \(The International Standard Classification of Education\) 2011](#)" and "[NQF-HETR \(National Qualifications Framework for Higher Education in Turkey\)](#)" profiles and fields of education as follows:

- ISCED Fields of Education: 42 –Life sciences
- ISCED Level:7, Category (Orientation): 74, Sub-category (Position): 747-Academically oriented "second cycle" degree
- National Qualifications Framework for Higher Education in Turkey (NQF-HETR) Field of Education: 42–Life sciences
- National Qualifications Framework for Higher Education in Turkey (NQF-HETR) Profile of education: Academically-oriented "second cycle" degree

### **Learning and Teaching Methods**

The most frequently used instructional methods of the educational programs of University of Ömer Halisdemir are given below. Programmes commonly apply these methods as appropriate instructional approaches in accordance with their aims and objectives.

The instructional methods applied for achieving the goal of meeting the expected learning outcomes of the Master's Degree program in BIOTECHNOLOGY program at large are indicated in the section of 'program learning outcomes', and those methods utilized for individual course units are indicated in the relevant section of "description of indivusal course unit'.

### **Learning and Teaching Methods**

- Lecture & In-Class Activities
- Land Surveying
- Group Work
- Laboratory
- Reading
- Assignment (Homework)
- Project Work
- Seminar
- Web Based Learning
- Implementation/Application/Practice
- Thesis Work
- Field Study
- Report Writing

### **Occupational Profiles of Graduates with Examples**

Our graduates with a master's degree trained as specialists and as a scientist at national and international level that can identify problems in various areas in the field from different perspectives and can handle an issue with all aspects. In addition, they study in industrial enterprises technical staff, R&D personnel and/or able to work as an administrator which private or publicly owned produce and develop technological products such as pharmaceutical, enzyme, medical and chemical substances, environment (water treatment technology, soil and improvement of water resources), fight against agricultural pests, food, medicine and stem cell centers. They may continue their academic career as enrollment related to doctoral programs at universities in Turkey and abroad.

## **Qualification Requirements and Regulations**

Master's Degree program (second cycle) in BIOTECHNOLOGY is awarded to students who defended his/her thesis successfully, and have completed all the courses with at least a letter grade of CB or S in the program.

For detailed information: Please see "[University of Niğde Ömer Halisdemir's Rules & Regulations for Graduate Education](#)".

## **Access to Further Studies**

Graduates who successfully completed the Master's program, in register the doctoral program at universities in Turkey and abroad can continue their academic career.

## **Examination Regulations, Assessment and Grading**

The methods applied for assessment of the achievement of the expected program learning outcomes for the entire Second Cycle program of BIOTECHNOLOGY are shown below and those for the individual course units are given in the relevant section of the course description with their contribution to the final grades.

- Mid-Term Exam
- Final Exam
- Make -up Exam
- Short Exam
- Homework Assessment
- Presentation of Report
- Computer Based Presentation
- Presentation of Thesis
- Presentation of Document

Mid-term and final examinations are conducted in dates, places and times determined and announced by the University. The students' final semester grade is given by their instructors based on mid-term examination, homework evaluation, short-examinations, final examination and, if there is any other assessment results taking into account the students' compliance with attendance to the course activities.

The contribution of assessment grades of the in-term activities to the final grade is 40% and that of the final exam is 60% for all the course units.

### **Grading:**

The success of a student for each assessment (in -term and final) defined for each course unit is evaluated by the instructor. Evaluations are made over a scale of 100 points and converted to the letter grades at the end of the semester. A student is considered to be successful in a course if he/she gets one of the following grades: AA, BA, BB, CB, S, or EX. The student's academic standing is calculated in the form of a Grade Point Average (GPA) out of a scale of 4.00 and announced at the end of each semester. The total grade point of a course is obtained by multiplying the grade point by the course ECTS credit. The semester GPA is calculated by dividing the total amount of grade points of courses gained in that semester by the total amount of ECTS credits of courses taken in the semester. The year long courses are included in the spring semester GPA. Cumulative Grade Point Average (CGPA) is calculated by dividing the total amount of grade points of all the courses in the curriculum to be taken by the total amount of 120 ECTS credits. For each course taken, the student is given one of the following letter grades and grade points:

Course grade	Grade points
AA	4,00
BA	3,50
BB	3,00
CB	2,50
CC	2,00
DC	1,50
DD	1,00
FD	0,50
FF	0,00

### Othergrades:

S (Satisfactory): Satisfactory in non-credit courses,

U (Unsatisfactory): Unsatisfactory non-credit courses,

P (InProgress): Successful at the end of the first semester for a year long course

EX (Exempt): Successful in an exemption exam held by the university,

NI (Not Included): Assigned for course not included in CGPA

NA (No Attendance): Unsuccessful because of not fulfilled the attendance and/or laboratory requirements

T (Transfer): Standing for the received course grade of the transferred students from other departments or universities. It is not included in CPA calculations. Transfer coursegrade.

Please see the section of "Grade Evaluation" for detailed information.

### Graduation Requirements

In order for a student to graduate from Master's Degree (Second Cycle) Programme in BIOTECHNOLOGY, he/she has

- Completed 120 ECTS credits with passing grades (56 ECTS creditsfor 7 graduate courses, 6 ECTS credits for a Seminar Course, 6 ECTS credits for 3 Special Topics Courses (one of them is proposal of thesis), and 60 ECTS credits for Thesis Studies taken at 2 consecutive semesters).
- Prepared and defended a thesis successfully.

### Mode of Study:

Master of Science Programme in Biotechnology at University of Ömer Halisdemir is a full time / face to face programme.

### Contact (Programme Director or Equivalent)

Position	Name and Surname	Telephone	E-mail
HEAD OF DEPARTMENT	Prof. Dr. Ayten ÖZTÜRK	+903882254208	<a href="mailto:aozturk@ohu.edu.tr">aozturk@ohu.edu.tr</a> <a href="mailto:biyoteknoloji@ohu.edu.tr">biyoteknoloji@ohu.edu.tr</a>
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