This definitive record sets out the essential features and characteristics of the MSc Regenerative Medicine course. The information provided is accurate for students entering level 7 in the 2017-18 academic year.

Course Summary
The MSc Regenerative Medicine aims at training graduate students in the biological and chemical basis of tissue regeneration, stem cell biology and biotechnology, and the challenges associated to this constantly evolving subject field, considered to be the medicine of the 21st century. The course will give consideration to the aspects of biotechnology business, regulatory affairs, and ethical issues, as key components of the global regenerative medicine sector, enabling technologies and translational science thinking. The transition into the subject area will be eased by introducing and/or reinforcing fundamentals of cell biology, biotechnology, research methods and advanced practical laboratory skills, so to bring applicants from different science, health, or medicine background at the same level. MSc graduates will be prepared for entry into positions in the commercial and biotech sector, academic research, academic teaching, science consultancy, science legal or business science-related employment, and/or further studies at a PhD level.

The philosophy of this Masters Degree programme is to present students with a good balance between translational science and biotechnological components and fundamental cutting-edge research questions, within the field of regenerative medicine. National and
University of Suffolk

DEFINITIVE COURSE RECORD

international collaborations with businesses and research institutions, together with an established scholar culture within the Department encourage the students to be integrative members of a wide scientific community.

Course Aims

- Develop a thorough understanding of knowledge of the molecular and cellular basis of stem cells and their uses in regenerative medicine supported by current scholarship and research
- Demonstrate critical awareness of current issues and developments in regenerative medicine and stem cell research
- Produce a research project in the subject, which will include a critical review of existing contemporary literature, evaluation of methodologies, as well as data collection, and interpretation
- Develop and demonstrate a range of skills to extend the ability to undertake enhanced levels of independent learning, use initiative, demonstrate personal responsibility and independent problem solving, make decisions and communicate effectively using a range of media to both specialists and non-specialists
- Enable individuals to engage with contemporary expertise and opportunities to interact with academic peers

Course Learning Outcomes

The following statements define what students graduating from the MSc Regenerative Medicine course will have been judged to have demonstrated in order to achieve the award. These statements, known as learning outcomes, have been formally approved as aligned with the generic qualification descriptor for level 7 awards as set out by the UK Quality Assurance Agency (QAA)\(^6\).

1. Demonstrate an in-depth knowledge and critical evaluation of the molecular and cellular basis of stem cells and their application in regenerative medicine
2. Demonstrate thorough knowledge and critical understanding of tissue development, patterning and regeneration
3. Demonstrate an in-depth knowledge and critical appraisal of key aspects of cell biology and biotechnology, especially relating to the area of regenerative medicine
4. Synthesise, present, critically evaluate and interpret scientific data related to stem cells and regenerative medicine
5. Demonstrate a critical awareness of the current issues and developments in specific areas of research, biomedicine and industry related to stem cells and regenerative medicine
6. Research, apply and critically evaluate methodologies and consider alternative approaches to solve problems associated with life sciences, and particularly with regenerative medicine

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\(^{6}\) As set out in the QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014)
7. Design, plan, and conduct a practical dissertation within the subject discipline of life science/regenerative medicine and critically evaluate the significance of the outcomes.

8. Demonstrate the following skills: synthesis of information, extended independent learning, use of initiative, problem-solving, decision making and effective communication using a range of media.

9. Demonstrate self-direction and personal responsibility in carrying out a task/project.

**Course Design**

The design of this course has been guided by the following QAA Benchmark:

- Master’s Degree Characteristics Statements (QAA 2010, 2014 and 2015)

**Course Structure**

The MSc Regenerative Medicine comprises modules at level 7.

Module Specifications for each of these modules are included within the course handbook, available to students on-line at the beginning of each academic year.

<table>
<thead>
<tr>
<th>Module</th>
<th>Credits</th>
<th>Module Type</th>
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</thead>
<tbody>
<tr>
<td>Cell Biology and Biotechnology</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Developmental Biology and Regeneration</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Advanced Laboratory Skills</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Stem Cell Biology</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Research Methods</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Cell Therapy and Tissue Engineering</td>
<td>20</td>
<td>M</td>
</tr>
<tr>
<td>Dissertation Project</td>
<td>60</td>
<td>M</td>
</tr>
</tbody>
</table>

**Awards**

On successful completion of the course, students will be awarded a MSc Regenerative Medicine. Students who leave the course early may be eligible for a PgD Regenerative Medicine on successful completion of 120 credits or a PgC Regenerative Medicine on successful completion of 60 credits.

**Course Delivery**

The course is delivered at Ipswich. Students studying full-time on MSc Regenerative Medicine are likely to have approximately 225 contact hours. The contact hours will be a mix of lectures, seminars, student-led workshops, practical activities, tutorials, guided VLE and reading week activities. Depending on each individual student’s plan, students may participate into external activities functional to collect their dissertation data. For example, students may be granted an Erasmus placement and bursary through competitive selection and conduct the research activity/collection of the dissertation data abroad. Alternatively,
students may conduct research activity/collection of the dissertation data in partnership with selected UK Research Institutes or Industries. A restricted number of placements will be available and will be allocated on a competitive basis. A list of placements, including Erasmus placements, will be presented to the students at the beginning of each academic year. Students are expected to participate in 5 to 8 hours/days of work placement. Placements will be broadly arranged by the University, with students interested into a placement making proactive contact with designated tutors. Additional arrangements for placements outside the academic capacity (i.e. transportation to/from placement, mileage, accommodation, subsistence, etc.) will be the responsibility of the student. The University reserve the right to withdraw the availability of external placements depending on funding accessibility and changes to long-term research plans.

Students will normally be expected to undertake a minimum of 40 hours of independent study in an average week, but should be prepared for this to vary based on assignment deadlines and class exercises.

Course Assessment
A variety of assessments will be used on the course to enable students to experience and adapt to different assessment styles. The assessment methods used will be appropriate to assess each module’s intended learning outcomes. Assessment on the course overall will be approximately 90% coursework (including essays, reports, oral presentations, group work, posters, practical assessments and research projects) and 10% examinations.

Course Team
The academic staff members delivering this course are drawn from a team that includes teaching specialists and current practitioners. All staff members are qualified in their subjects with their own specialist knowledge to contribute. The profiles of the academic staff delivering the course are available under the Course page: [https://www.uos.ac.uk/msc-regenerative-medicine](https://www.uos.ac.uk/msc-regenerative-medicine)

Course Costs
Students undertaking MSc Regenerative Medicine will be charged tuition fees as detailed below.

<table>
<thead>
<tr>
<th>Student Group</th>
<th>Tuition Fees</th>
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</thead>
<tbody>
<tr>
<td>Full-time UK/EU</td>
<td>£7,425 per year</td>
</tr>
<tr>
<td>Part-time UK/EU</td>
<td>£825 per 20 credit module</td>
</tr>
<tr>
<td>Full-time International</td>
<td>£11,580 per year</td>
</tr>
<tr>
<td>Part-time International</td>
<td>£1,290 per 20 credit module</td>
</tr>
</tbody>
</table>

Payment of tuition fees is due at the time of enrolment and is managed in accordance with the Tuition Fee Policy.

Students will be required to pay additional costs for course material printing, such as: lecture notes, assessed posters, recommended readings, amounting to a maximum of £250 per year payable as required. Students are likely to incur other costs for optional field trips amounting to approximately maximum £700 per year.

Academic Framework and Regulations
This course is delivered according to the Framework and Regulations for Taught Postgraduate Awards and other academic policies and procedures of the University and published on the [website](https://www.uos.ac.uk).