Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

# Annex SFB

# Studienfachbeschreibung (subject description, SFB) for the subject Biofabrication as a Master's with 1 major

## with the degree "" (120 ECTS credits)

Responsible: Faculty of Chemistry and Pharmacy

Examination regulations version: 2025

Abbreviations used:

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB:

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures:

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

**ASPO2015**

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

**??-???-2025 (2025-??)**

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

| Abbreviation | **Module title** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | ECTS | | Duration | (in semesters) | Method of grading | | Module level | |
| | Courses | To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y | | | | | | |
| | Method of assessment | | | | | | | |
| | Only after successful completion of | if applicable | | | | | | |
| | Other prerequisites | if applicable | | | | | | |
| | Participants and allocation of places | if applicable | | | | | | |
| | Additional information | if applicable | | | | | | |
| | Referred to in LPO I | if applicable (examination regulations for teaching-degree programmes) | | | | | | |

| Compulsory Courses (80 ECTS credits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Theoretical Basics of Biofabrication (20 ECTS credits)** | | | | | | | | |
| 03-FU-PM2-222-m01 | **Polymers II** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English<br>Assessment offered: Once a year, winter semester<br>creditable for bonus | | | | | |
| 03-BIO-FAB-252-m01 | **Biofabrication** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + Ü (1) + P (1)<br>Module taught in: V, Ü: German and/or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-PCM5-161-m01 | **Physical Chemistry of Supramolecular Assemblies** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | S (2) + Ü (1)<br>Module taught in: German or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 03-GEW-MAT-222-m01 | **Tissue cells meet materials** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and<br>b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes)<br>Language of assessment: German and/or English | | | | | |

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|---|---|---|---|---|---|---|---|---|
| **Pratical Biofabrication (60 ECTS credits)** | | | | | | | | |
| 08-BFFP1-152-m01 | **BioFab Research-Thesis 1** | | | | | | | |
| | ECTS | 30 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | P (0) | | | | | |
| | Method of assessment | | report on practical course (40 to 60 pages) and talk (approx. 20 to 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-BFFP2-152-m01 | **BioFab Research-Thesis 2** | | | | | | | |
| | ECTS | 30 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | P (0) | | | | | |
| | Method of assessment | | report on practical course (40 to 60 pages) and talk (approx. 20 to 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| **Compulsory Electives Theoretical Biofabrication (10 ECTS credits)** | | | | | | | | |
| **Theoretical Biofabrication (10 ECTS credits)** | | | | | | | | |
| 03-SP3A1-152-m01 | **Carrier materials and devices for therapeutic compounds** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (1) | | | | | |
| | Method of assessment | | a) report on practical course (approx. 10 pages) and b) written examination (approx. 90 minutes) or presentation (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 03-FU-Zell-152-m01 | **Principles of Cell Biology and Tissue Regeneration** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | | V (4) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 to 180 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or<br>d) log (approx. 20 pages) or<br>e) presentation (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-SCM1-161-m01 | **Supramolecular Chemistry (Basics)** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | S (3)<br>Module taught in: German or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes)<br>Language of assessment: German and/or English | | | | | |

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|---|---|---|---|---|---|---|---|---|
| 08-FU-PW1-161-m01 | **Polymer Materials 1: Technology of Polymer Modification** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes) or<br>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate)<br>Language of assessment: German and/or English<br>Assessment offered: Once a year, winter semester<br>P: creditable for bonus | | | | | |
| **Thesis (30 ECTS credits)** | | | | | | | | |
| 08-MBF-MT-152-m01 | **Master-Thesis Biofabrication** | | | | | | | |
| | ECTS | 25 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | No courses assigned to module | | | | | |
| | Method of assessment | | written thesis (approx. 60 pages)<br>Language of assessment: German and/or English | | | | | |
| | Additional Information | | Time to complete: 6 months. | | | | | |
| 08-MBF-KOLL-152-m01 | **Final Colloquium** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | No courses assigned to module | | | | | |
| | Method of assessment | | final colloquium (approx. 60 minutes): talk (approx. 30 minutes) with subsequent discussion (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| **Compulsory Courses Practical Biofabrication Double Degree (60 ECTS credits)** | | | | | | | | |
| **Pratical Biofabrication (60 ECTS credits)** | | | | | | | | |
| 08-BFFP1-152-m01 | **BioFab Research-Thesis 1** | | | | | | | |
| | ECTS | 30 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | P (0) | | | | | |
| | Method of assessment | | report on practical course (40 to 60 pages) and talk (approx. 20 to 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-BFFP2-152-m01 | **BioFab Research-Thesis 2** | | | | | | | |
| | ECTS | 30 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | P (0) | | | | | |
| | Method of assessment | | report on practical course (40 to 60 pages) and talk (approx. 20 to 30 minutes)<br>Language of assessment: German and/or English | | | | | |

| Compulsory Electives Theoretical Biofabrication Double Degree (30 ECTS credits) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Theoretical Biofabrication (30 ECTS credits)** | | | | | | | | |
| 03-FU-PM2-222-m01 | **Polymers II** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English<br>Assessment offered: Once a year, winter semester<br>creditable for bonus | | | | | |
| 03-BIO-FAB-252-m01 | **Biofabrication** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + Ü (1) + P (1)<br>Module taught in: V, Ü: German and/or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-PCM5-161-m01 | **Physical Chemistry of Supramolecular Assemblies** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | S (2) + Ü (1)<br>Module taught in: German or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes) or<br>c) talk (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 03-GEW-MAT-222-m01 | **Tissue cells meet materials** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and<br>b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes)<br>Language of assessment: German and/or English | | | | | |

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|---|---|---|---|---|---|---|---|---|
| 03-SP3A1-152-m01 | **Carrier materials and devices for therapeutic compounds** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (1) | | | | | |
| | Method of assessment | | a) report on practical course (approx. 10 pages) and b) written examination (approx. 90 minutes) or presentation (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-SCM1-161-m01 | **Supramolecular Chemistry (Basics)** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | S (3)<br>Module taught in: German or English | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes)<br>Language of assessment: German and/or English | | | | | |
| 03-FU-Zell-152-m01 | **Principles of Cell Biology and Tissue Regeneration** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | | V (4) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 to 180 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or<br>d) log (approx. 20 pages) or<br>e) presentation (approx. 30 minutes)<br>Language of assessment: German and/or English | | | | | |
| 08-FU-PW1-161-m01 | **Polymer Materials 1: Technology of Polymer Modification** | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | graduate |
| | Courses | | V (2) + P (2) | | | | | |
| | Method of assessment | | a) written examination (approx. 90 minutes) or<br>b) oral examination of one candidate each (approx. 20 minutes) or<br>c) oral examination in groups (groups of 2, approx. 30 minutes per candidate)<br>Language of assessment: German and/or English<br>Assessment offered: Once a year, winter semester<br>P: creditable for bonus | | | | | |
| 08-VPU-BF-152-m01 | **Courses at the partner university (BioFab Master)** | | | | | | | |
| | ECTS | 30 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | | No courses assigned to module | | | | | |
| | Method of assessment | | Assessments as specified by partner university abroad<br>Language of assessment: German and/or language spoken at partner university abroad | | | | | |
| | other prerequisites | | Please consult with course advisory service in advance. | | | | | |

<table>
<tr><th colspan="9">Thesis (30 ECTS credits)</th></tr>
<tr><td rowspan="4">08-MBF-MT-152-m01</td><td colspan="8">Master-Thesis Biofabrication</td></tr>
<tr><td>ECTS</td><td>25</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>graduate</td></tr>
<tr><td colspan="3">Courses</td><td colspan="6">No courses assigned to module</td></tr>
<tr><td colspan="3">Method of assessment</td><td colspan="6">written thesis (approx. 60 pages)<br>Language of assessment: German and/or English</td></tr>
<tr><td colspan="3">Additional Information</td><td colspan="6">Time to complete: 6 months.</td></tr>
<tr><td rowspan="4">08-MBF-KOLL-152-m01</td><td colspan="8">Final Colloquium</td></tr>
<tr><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>graduate</td></tr>
<tr><td colspan="3">Courses</td><td colspan="6">No courses assigned to module</td></tr>
<tr><td colspan="3">Method of assessment</td><td colspan="6">final colloquium (approx. 60 minutes): talk (approx. 30 minutes) with subsequent discussion (approx. 30 minutes)<br>Language of assessment: German and/or English</td></tr>
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