

# **Appendix for the Bachelor degree programmes in Biology and Life Science & Technology**

## **Appendix I Learning outcomes of the Bachelor's degree programme (Article 1.3.a)**

Graduates are able to:

1. Explain general basic principles of biology and describe how they relate to each other;
2. A (Biology): Estimate the relevance of research results in one or more areas of biology published in academic journals and discuss these results with peers;  
B (LST): Estimate the relevance of research results in medicine and STEM published in academic journals and discuss these results with peers;
3. A (Biology): Describe fundamental and/or applied scientific research and recognize areas of interest within it;  
B (LST): Describe fundamental and/or applied scientific research and/or a technological biomedical design method and recognize areas of interest within it;
4. Describe the relationship between various disciplines and integrate terms and concepts from the subject areas;
5. Recognise and analyse scientific problems, and design a scientific/academic approach to them in a systematic manner.
6. Under supervision, formulate a research hypothesis or propose a research design within their own discipline, and possess sufficient practical skills to conduct the research themselves;
7. Explain the societal relevance of the discipline, evaluate the related responsibilities and judge their individual role in that context.
8. Develop a work method independently and proactively, justify it, and carry it out in order to achieve a specific aim;
9. Contribute to and take responsibility for solving a specific problem or task in a specific role as part of a team;
10. Report about research in a structured manner, both orally and in writing;

The degree programmes also offer the student:

11. To explore career opportunities and opportunities for follow-on degree programmes.

## **Appendix II Majors and Minors of the degree programme (Article 2.1.4)**

The degree programme has the following Major(s):

### **Majors within the degree programme Biology:**

- Behaviour and Neurosciences
- Biomedical Sciences
- Ecology and Evolution
- Molecular Life Sciences
- Integrative Biology

### **Majors within the degree programme Life Science & Technology**

- Behaviour and Neurosciences
- Biomedical Engineering
- Biomedical Sciences
- Molecular Life Sciences

### **Possible Minors available to students from both degree programmes\***

- Behaviour and Neurosciences
- Biomedical Engineering
- Biomedical Sciences
- Biomedical Sciences/Behaviour and Neurosciences
- Ecology & Evolution
- Implantation and Function Recovery
- Molecular Life Sciences
- Pharmacy

*\* Please note that these minors are not yet definite and can change in 2020-2021.*

### **Minors available to students within the Faculty of Science & Engineering:**

- Modelling in the Life Sciences

### **Minors available to students from outside the degree programme:**

- Neuroscience

## Appendix III Course units in the propaedeutic phase

- List of course units; Article 3.1.1
- Compulsory order of examinations; Article 8.2

### First semester (all majors):

Course unit name	ECTS
Basic Cell and Molecular Biology	5
Physiology	5
Genetics, Ecology & Evolution	5
Microbiology	5
Lab Course	3
Biostatistics 1	5
First Year Symposium	2

### Second semester:

#### Majors Behaviour and Neurosciences, Biomedical Sciences, Molecular Life Sciences

Course unit name	ECTS
Behavioural Neurosciences	5
Molecules of Life	5
Cell Biology and Immunology	5
Metabolism	5
Research skills in Life Sciences	10

#### Major Ecology & Evolution

Course unit name	ECTS
Behavioural Neurosciences	5
Evolutionary Ecology	5
Biochemistry and Cell Biology in Ecology and Evolution	5
Ecophysiology of Plants and Animals	5
Research Skills in Ecology and Evolution	10

#### Major Biomedical Engineering

Course unit name	ECTS
Methodical Design 1	5
Molecules of Life	5
Cell Biology and Immunology	5
Computer-aided design (CAD)	5
Mathematics for Life Sciences	5
Biological Physics	5

**Major Integrative Biology – Option A\***

<b>Course unit name</b>	<b>ECTS</b>
Behavioural Neurosciences	5
Molecules of Life	5
Cell Biology and Immunology	5
Metabolism	5
Research skills in Life Sciences	10

**Major Integrative Biology – Option B\***

<b>Course unit name</b>	<b>ECTS</b>
Behavioural Neurosciences	5
Evolutionary Ecology	5
Biochemistry and Cell Biology in Ecology and Evolution	5
Ecophysiology of Plants and Animals	5
Research Skills in Ecology and Evolution	10

\* Students have to choose Option A or Option B.

## Appendix IV Course units in the post-propaedeutic phase

- **List of course units; Article 6.1.1**
- **Compulsory order of examinations; Article 8.2**

This appendix describes the post-propaedeutic phase for students who started their programme in 2018/2019. Students who started in 2017/2018 or before have to satisfy the programme requirements that are described in the TER of their starting year.

### 1. Major-specific requirements

The post-propaedeutic phase is composed of 90 ECTS major-specific course units (described below for each major), plus a minor programme of 30 ECTS.

#### 1.1. Major Biomedical Sciences

##### *Compulsory course units (50 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Molecular genetics	5
Integrative Neuroscience <i>or</i> Medical Structural Biology	5
Bioinformatics	5
Host-microbe Interactions	5
Immunology	5
Modelling Life	5
Biology & Society: Ethical and Professional Aspects	5
Research project in Biomedical Sciences	10
Bachelor Thesis	5

##### *Elective course units (40 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Integrative Neuroscience	5
Medical Structural Biology	5
Medical Cell Biology	5
Immunology and Disease	5
Food and Metabolism	5
Human Genetics and Genomics	5
Biology of Cancer	5
Evolutionary Medicine	5
Epigenetics and Gene-editing	5
Big Data in Human Disease	5
Endocrinology	5
Neurobiology of Ageing	5
Molecular Research in Human Disease	5
Cardiovascular Disease	5
Microbes and Infection	5
Medical Physiology	5
Hematopoietic Stem Cells, Differentiation and Development	5
Bio-organic Chemistry	5
Regenerative Medicine (only in year 3)	5
Research project in Biomedical Sciences	10
Career Orientation	5

## 1.2. Major Behaviour and Neurosciences

*Compulsory course units (55 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Molecular genetics	5
Integrative Neuroscience	5
Chronobiology <i>or</i> Bioinformatics <i>or</i> Genes and Evolution	5
Behavioural Biology	5
Genes and Behaviour <i>or</i> Immunology	5
Modelling Life	5
Biology & Society: Ethical and Professional Aspects	5
Research project in Behaviour and Neurosciences	10
Bachelor Thesis	5

*15 ECTS from the following course units*

<b>Course unit name</b>	<b>ECTS</b>
Biology of Human Behaviour	5
Evolutionary Medicine	5
Endocrinology	5
Neurobiology of Ageing	5
Psychobiology	5

*Elective course units (20 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Chronobiology	5
Bioinformatics	5
Genes and Evolution	5
Genes and behavior	5
Immunology	5
Biology of Human Behaviour	5
Food and Metabolism	5
Biostatistics II	5
Evolutionary Medicine	5
Evolutionary Processes	5
Endocrinology	5
Epigenetics and gene editing	5
Big data in human disease	5
Evolution and Development	5
Neurobiology of Ageing	5
Evolutionary and ecological genomics	5
Integrative biology	5
Psychobiology	5
Microbes and infection	5
Medical physiology	5
Microbiome	5
Research project in Behaviour and Neurosciences	10
Career Orientation	5

### 1.3. Major Molecular Life Sciences

*Compulsory course units (75 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Molecular Genetics	5
Integrative Neuroscience <i>or</i> Medical Structural Biology	5
Bioinformatics	5
Host-microbe Interactions	5
Immunology	5
Modelling Life	5
Cell Biology and Microscopy	5
Molecular Biology	5
Practical Carrousel	5
Enzymology and Thermodynamics	5
Bio-organic Chemistry	5
Biology & Society: Ethical and Professional Aspects	5
Research project in Molecular Life Sciences	10
Bachelor thesis	5

*10 ECTS from the following course units*

<b>Course unit name</b>	<b>ECTS</b>
Biotechnology	5
Bioanalytical Omics Techniques	5
Programming for Life Sciences	5

*Elective course units (5 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Medical Cell Biology	5
Immunology and Disease	5
Food and Metabolism	5
Human Genetics and Genomics	5
Biology of Cancer	5
Evolutionary Medicine	5
Epigenetics and Gene-editing	5
Big Data in Human Disease	5
Endocrinology	

## 1.4. Major Ecology and Evolution

### *Compulsory course units (60 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Systems Ecology & Ecological Interactions	10
Genes and Evolution	5
Behavioural Biology <i>or</i> C++ for Biologists	5
Genes and Behaviour <i>or</i> Conservation Biology	5
Modelling Life	5
Biostatistics II	5
Biology & Society: Ethical and Professional Aspects	5
Research project in Ecology and Evolution	10
Bachelor thesis	5

### *Elective course units (30 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Behavioural Biology	5
C++ for Biologists	5
Genes & Behaviour	5
Conservation Biology	5
Marine Biology	5
Biology of Human Behaviour	5
Evolutionary Medicine	5
Evolutionary Processes	5
Evolution and Development	5
Big Data Management in Ecology and Evolution	5
Evolutionary and Ecological Genomics	5
Integrative Biology	5
Microbiome	5
Self-organisation	5
Research project in Ecology and Evolution	10
Career Orientation	5



## 1.5. Major Biomedical Engineering

*Compulsory course units (90 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Biomechanics	5
Material Science	5
Anatomy and Histology	5
Designing biomedical products 2	5
Biomaterials 1	5
Thermodynamics	5
Regenerative Medicine	5
Medical Implants	5
Biological Implant Evaluation	5
Practical Chemistry for BMT <b>or</b> Programming for Life Sciences	5
Medical Technology and Society	5
Transport in Biological Systems	5
Signals and Systems	5
Imaging Techniques in Radiology 1	5
Numerical Methods	5
Bachelor research BME	10
Bachelor Thesis	5

## 1.6. Integrative Biology

*Compulsory course units (80 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Molecular Genetics	5
Integrative Neuroscience	5
Chronobiology <i>or</i> Bioinformatics <i>or</i> Genes and Evolution	5
Behavioural Biology <i>or</i> Host-Microbe Interactions <i>or</i> C++ for Biologists	5
Genes and Behaviour <i>or</i> Immunology <i>or</i> Conservation Biology	5
Modelling Life	5
Evolutionary Medicine	5
Evolution and Development	5
Integrative Biology	5
Biology & Society: Ethical and Professional Aspects	5
Research project I in Integrative Biology	10
Research project II in Integrative Biology	10
Bachelor thesis	5

*Elective course units (10 ECTS)*

<b>Course unit name</b>	<b>ECTS</b>
Chronobiology	5
Bioinformatics	5
Genes and Evolution	5
Behavioural Biology	5
Host-Microbe interactions	5
C++For Biologists	5
Genes and Behaviour	5
Immunology	5
Conservation Biology	5
Marine Biology	5
Biostatistics II	5
Biology of Human Behaviour	5
Microbiome	5
Self Organisation	5
Career Orientation	5

## **2. Minors**

The content of minors for students who have started in 2018/2019 or later years has not yet been established.

## **3. Courses with one or several practical components**

The course units listed in Appendix IV have a strong integration of practicals, lectures, and tutorials. Course units where the final assessment is not solely through a written exam are assessed through practicals. For further information, see OCASYS.

## **4. Compulsory order of examinations**

All course units in the curriculum are accumulative and assume knowledge, insight and skills to have been obtained in previous courses. Any deficiencies should be repaired as soon as possible.

## Appendix V Entry requirements (Article 2.1, article 2.2)

### A. Deficient VWO-diploma

- The following requirements apply to the entrance examination as defined in Article 7.28.3 of the Act:

<b>Bacheloropleiding</b> <i>Bachelor's degree programme</i>	<b>N+T</b>	<b>N+G</b>	<b>E+M</b>	<b>C+M</b>
<b>Biologie</b> <i>Biology</i>	Biologie	Natuurkunde	Wiskunde A of B Natuurkunde Scheikunde Biologie	Wiskunde A of B Natuurkunde Scheikunde Biologie
<b>Farmacie</b> <i>Pharmacy</i>	V	Natuurkunde	Natuurkunde Scheikunde	Wiskunde A of B Natuurkunde Scheikunde
<b>Life Science and Technology</b>  <b>Scheikunde</b> <i>Chemistry</i> <b>Scheikundige Technologie</b> <i>Chemical Engineering</i>	V	Wiskunde B Natuurkunde	Wiskunde B Natuurkunde Scheikunde	Wiskunde B Natuurkunde Scheikunde
<b>Biomedische Technologie (in formation)</b> <i>Biomedical Engineering</i>	V	Wiskunde B Natuurkunde	Wiskunde B Natuurkunde	Wiskunde B Natuurkunde
<b>Informatica</b> <i>Computing Science</i> <b>Technische Bedrijfskunde</b> <i>Industrial Engineering and Management</i> <b>(Technische) Wiskunde</b> <i>(Applied) Mathematics</i>	V	Wiskunde B	Wiskunde B	Wiskunde B
<b>Kunstmatige Intelligentie</b> <i>Artificial Intelligence</i>	V	V	V	Wiskunde A of B
<b>(Technische) Natuurkunde</b> <i>(Applied) Physics</i> <b>Sterrenkunde</b> <i>Astronomy</i>	V	Wiskunde B Natuurkunde	Wiskunde B Natuurkunde	Wiskunde B Natuurkunde

- The Admissions Board Bachelor's programmes FSE will determine whether deficiencies have been compensated satisfactorily.

**B. HBO (university of applied sciences) or academic propaedeutic certificate**

- The following requirements apply to the entrance examination as defined in Article 7.28.3 of the Act:

<b>Bachelor's degree programme</b>	<b>Subjects at VWO (pre-university) level</b>
B Biology	wia or wib + na+sk+bio
B Pharmacy	wia or wib + na+sk
B Life Science and Technology	wib+na+sk
B Computing Science	wib
B Artificial Intelligence	wia or wib
B Physics	wib+na
B Chemistry	wib+na+sk
B Astronomy	wib+na
B Mathematics	wib
B Chemical Engineering	wib+na+sk
B Industrial Engineering and Management Science	wib
B Applied Physics	wib+na
B Applied Mathematics	wib

wia = Mathematics A; wib = Mathematics B; na = Physics; sk = Chemistry; bio = Biology

- In addition, candidates are required to be competent in English:

	<b>Overall</b>	<b>Reading</b>	<b>Listening</b>	<b>Speaking</b>	<b>Writing</b>
<b>IELTS (Academic)</b>	6.5	6.5	6.5	6.5	6.5
<b>TOEFL IBT (internet-based test)</b>	90	21 * (19-23)	21 * (20-23)	21 * (20-22)	24 (24-26)
<b>Cambridge English</b>	CAE or CPE Certificate with a minimum score of 180				
<b>English language test - UG Language Centre</b>		B2	B2	B2	C1

- The Admissions Board Bachelor programmes FSE will determine whether deficiencies have been compensated satisfactorily.

### C. Foreign qualifications (EEA)

1. Any certificate that grants access to a university in a European country will also grant access to Dutch universities.
2. In the entrance examination, as referred to in art. 7.28, paragraph 3 of the Act, per country and educational institution specific training conditions are mentioned. These are standardized. The entrance examination is, in accordance with the Admissions Board Bachelor's programmes FSE, carried out by the Admissions Office. If for a specific diploma no standardisation has taken place then the requirements as formulated for candidates with a HBO (university of applied science) propaedeutic certificate will apply to these candidates in the entrance examination as defined in Article 7.28.3 of the Act (see A).
3. In addition, candidates are required to be competent in English:

	<b>Overall</b>	<b>Reading</b>	<b>Listening</b>	<b>Speaking</b>	<b>Writing</b>
<b>IELTS (Academic)</b>	6.5	6.5	6.5	6.5	6.5
<b>TOEFL IBT (internet-based test)</b>	90	21 * (19-23)	21 * (20-23)	21 * (20-22)	24 (24-26)
<b>Cambridge English</b>	CAE or CPE Certificate with a minimum score of 180				
<b>English language test - UG Language Centre</b>		B2	B2	B2	C1

4. The Admissions Board Bachelor's programmes FSE will determine whether deficiencies have been compensated satisfactorily.

### D. Foreign qualifications (non-EEA)

1. A non-European certificate that according to NUFFIC and/or NARIC standards is equivalent to a Dutch VWO certificate will grant access to university in the Netherlands.
2. In the entrance examination, as referred to in art. 7.28, paragraph 3 of the Act, per country and educational institution specific training conditions are mentioned. These are standardized. The entrance examination is, in accordance with the Admissions Board Bachelor's programmes FSE, carried out by the Admissions Office. If for a specific diploma no standardisation has taken place then the requirements as formulated for candidates with a HBO (university of applied science) propaedeutic certificate will apply to these candidates in the entrance examination as defined in Article 7.28.3 of the Act (see A).

3. In addition, candidates are required to be competent in English:

	<b>Overall</b>	<b>Reading</b>	<b>Listening</b>	<b>Speaking</b>	<b>Writing</b>
<b>IELTS (Academic)</b>	6.5	6.5	6.5	6.5	6.5
<b>TOEFL IBT (internet-based test)</b>	90	21 * (19-23)	21 * (20-23)	21 * (20-22)	24 (24-26)
<b>Cambridge English</b>	CAE of CPE Certificate with a minimum score of 180				
<b>English language test - UG Language Centre</b>		B2	B2	B2	C1

4. The Admissions Board Bachelor's programmes FSE will determine whether deficiencies have been compensated satisfactorily.

### **E. Entrance examination (Colloquium Doctum)**

1. The following requirements apply to the entrance examination as defined in Article 7.29 of the Act:

<b>Degree programme</b>	<b>Nature and Health VWO level</b>	<b>or</b>	<b>Nature and Technology VWO level</b>
B Biology	en, wia or b, sk, bio, na		en, wib, na, sk, bio
B Pharmacy	en, wia or b, sk, bio, na		en, wib, na, sk
B Life Science and Technology	en, wib, sk, bio, na		en, wib, na, sk
B Computing Science	en, wib, sk, bio		en, wib, na, sk
B Artificial Intelligence	en, wia or b, sk, bio		en, wib, na, sk
B Physics	en, wib, sk, bio, na		en, wib, na, sk
B Chemistry	en, wib, sk, bio, na		en, wib, na, sk
B Astronomy	en, wib, sk, bio, na		en, wib, na, sk
B Mathematics	en, wib, sk, bio		en, wib, na, sk
B Chemical Engineering	en, wib, sk, bio, na		en, wib, na, sk
B Industrial Engineering and Management Science	en, wib, sk, bio		en, wib, na, sk
B Applied Physics	en, wib, sk, bio, na		en, wib, na, sk
B Applied Mathematics	en, wib, sk, bio		en, wib, na, sk

en = English; wia = Mathematics A; wib = Mathematics B; na = Physics; sk = Chemistry; bio = Biology

2. In addition, candidates are required to be competent in English:

	<b>Overall</b>	<b>Reading</b>	<b>Listening</b>	<b>Speaking</b>	<b>Writing</b>
<b>IELTS (Academic)</b>	6.5	6.5	6.5	6.5	6.5
<b>TOEFL IBT (internet-based test)</b>	90	21 * (19-23)	21 * (20-23)	21 * (20-22)	24 (24-26)

<b>Cambridge English</b>	CAE or CPE Certificate with a minimum score of 180				
<b>English language test - UG Language Centre</b>		B2	B2	B2	C1

3. The Admissions Board Bachelor's programmes FSE will determine whether deficiencies have been compensated satisfactorily.



## Appendix VI Clustering of Bachelor's degree programmes Article 5.3.4, Article 5.6.1

<b>Degree programme CROHO code</b>	<b>Name of degree programme</b>	<b>Clustered with CROHO code</b>	<b>Name of degree programme</b>
56286	B Life Science and Technology	56860 56157 56226	B Biology B Pharmacy B Biomedical Engineering (in formation)
56860	B Biology	56286 56157 56226	B Life Science and Technology B Pharmacy B Biomedical Engineering (in formation)
56157	B Pharmacy	56860 56286 56226	B Biology B Life Science and Technology B Biomedical Engineering (in formation)
56226	B Biomedical Engineering (in formation)	56860 56286 56157	B Biology B Life Science and Technology B Pharmacy
56980	B Mathematics	56965 50206 56962 50205	B Applied Mathematics B Physics B Applied Physics B Astronomy
56965	B Applied Mathematics	56980 50206 56962 50205	B Mathematics B Physics B Applied Physics B Astronomy
50206	B Physics	56962 50205 56965 56980	B Applied Physics B Astronomy B Applied Mathematics B Mathematics
56962	B Applied Physics	50206 50205 56965 56980	B Physics B Astronomy B Applied Mathematics B Mathematics
50205	B Astronomy	56962 56965 50206 56980	B Applied Physics B Applied Mathematics B Physics B Mathematics
56857	B Chemistry	56960	B Chemical Engineering

56960	B Chemical Engineering	56857	B Chemistry
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## **Appendix VII Admission to the post-propaedeutic phase**

### **Article 5.1.1**

The following candidates will be admitted to the post-propaedeutic phase:

Students who have been issued a positive study advice from the degree programmes Biology or Life Science & Technology at the University of Groningen.

The Admission Board decides over students from other degree programmes.

## **Appendix VIII Contact hours propaedeutic phase**

### **Article 2.3**

<b>Degree programme year 1</b>	
<b>Structure contact hours</b>	<b>Contact hours per year (depends on chosen major)</b>
Lectures	250-290
Tutorials	130-170
Practicals	150-240
Supervision during an internship	10
Examinations	30-35
Career services	8

## **Appendix IX University Minors of the faculty of Science and Engineering (Article 8.5.1)**

1. Neurosciences Minor (taught in English):

- Neuroscience (15 ECTS)
- Behavioural Neuroscience (15 ECTS)

Future Planet Innovation (taught in English) (*not offered in 2019-2020*):

- Global Challenges (10 ECTS)
- Sustainability in perspective (5 ECTS)
- Sustainable contributions to society (15 ECTS)

Astronomy through Space and Time Minor (taught in English):

- The Evolving Universe (5 ECTS)
- Cosmic Origins (5 ECTS)
- Astrobiology (5 ECTS)

Einstein's physics: Space-time and parallel worlds (taught in English):

- Einstein's Universe (5 ECTS)
- Quantum World (5 ECTS)
- Building blocks of matter (5 ECTS)

2. The Programme Committee for the Bachelor's degree programmes in Biology and Life Science and Technology also has authority in the field of the Minor "Neurosciences" and/or its course units.

The Programme Committee for the Master's degree programme in Energy and Environmental Sciences also has authority in the field of the Minor "Future Planet Innovation" and/or its course units.

The Programme Committee for the Bachelor's degree programme in Astronomy also has authority in the field of the Minor "Astronomy through Space and Time" and/or its course units.

The Programme Committee for the Bachelor's degree programmes in Physics and Applied Physics also has authority in the field of the Minor "Einstein's physics: Space-time and parallel worlds" and/or its course units.

3. The Board of Examiners for the Bachelor's degree programmes in Biology and Life Science and Technology and the Master's degree programmes in Biology, Ecology and Evolution, Marine Biology and Molecular Biology and Biotechnology also has authority in the field of the Neurosciences Minor and/or its course units.

The Board of Examiners for the Master's degree programme in Energy and Environmental Sciences also has authority in the field of the "Future Planet Innovation" Minor and/or its course units.

The Board of Examiners for the Bachelor's degree programme in Astronomy also has authority in the field of the Astronomy through Space and Time Minor and/or its course units.

The Board of Examiners for the Bachelor's degree programmes in Physics and Applied Physics also has authority in the field of the Physics Minor "Einstein's physics: Space-time and parallel worlds" and/or its course units.

4. These Teaching and Examination Regulations also apply in their entirety to the Minors in Neurosciences, Future Planet Innovation, Astronomy through Space and Time and Einstein's physics: Space-time and parallel worlds and/or their course units.

## **Appendix X Transitional arrangement:**

### **Transitional arrangement for the Bachelor degree programmes Biology and Life Science & Technology**

#### **10.1. Course units that change in the new curriculum**

The course units in the first column (old curriculum) will no longer be taught as of academic year 2019-2020. These will be replaced by the course units in the third column (new curriculum).

<b>Old curriculum</b>	<b>Old course code</b>	<b>New curriculum</b>	<b>New course code</b>
Behavioural Biology	WLB0709	Behavioural Biology	WBLS19008
Big data in Systems medicine	WBLS15001	Big Data in Human Disease <b>OR</b> Big Data Management Ecology and Evolution (depending on major)	WBLS19015 <b>OR</b> WBLS19016  (depending on major)
Bioinformatics	WLP10B21	Bioinformatics	WBLS19001
Biology of Cancer	WBLS13001	Biology of Cancer	WBLS19017
Biology of Human Behaviour	WLB07030	Biology of Human Behaviour	WBLS19018
Bio-organic Chemistry	WLB0702	Bio-organic Chemistry	WBLS19034
Biostatistics N2	WLB07093	Biostatistics II	WBLS19019
Cardiovascular Disease	WBLS14001	Cardiovascular Disease	WBLS19035
Chronobiology	WLB07019	Chronobiology	WBLS19002
Conservation Biology	WLB07020	Conservation Biology	WBLS19010
Ecological Interactions	WLB0705	Systems ecology & Ecological interactions (5 out of 10 ECTS)	WBLS19007
Endocrinology	WLB07032	Endocrinology	WBLS19021
Evolutionary Ecology	WLB07016	Evolutionary ecology	WPLS18008
Flora & Fauna	WLB07055	Research skills in Ecology & Evolution (5 out of 10 ECTS)	WPLS18019
Food & Metabolism	WLB07051	Food & Metabolism	WBLS19026
Genes & Behaviour	WLB07010	Genes & Behaviour	WBLS19011
Genes & Evolution	WLB0707	Genes & Evolution	WBLS19003
Hematology	WBLS14003	Hematopoietic Stem Cells, Differentiation and Development	WBLS19038
Human Genetics & Genomics	WLB07048	Human Genetics & Genomics	WBLS19027
Immunology I	WLB0701	Immunology	WBLS19013
Immunology II	WLB07025	Immunology and Disease	WBLS19028
Integrative Neurobiology	WLB07015	Integrative Neurosciences	WBLS19004
Material Science	WLB07094	Material Science	WLB07094
Medical Cell Biology	WLB07029	Medical Cell Biology	WBLS19030
Medical Implants	WLB07035	Medical Implants	WLB07035
Medical Physiology	WLB07053	Medical Physiology	WBLS19040

<b>Old curriculum</b>	<b>Old course code</b>	<b>New curriculum</b>	<b>New course code</b>
Medical proteomics & genomics	WLB07090	(Medical) Genomics & Proteomics	WLB07090
Medical Technology and Society	WLB07054	Medical Technology and Society	WLB07054
Molecular and Cellular Microscopy	WLB07040	Cell Biology and Microscopy	WBLS19020
Molecular Biology & Medical Biology	WLB07018	Molecular Biology & Medical Biology (video lectures)	WLB07018
Molecular research techniques human diseases	WLB07102	Molecular research techniques human diseases	WBLS19043
Neurobiology of Ageing	WLB07098	Neurobiology of Ageing	WBLS19044
Psychobiology	WLB07049	Psychobiology	WBLS19045
Science, Ethics, Technology, and Society	WLB07023	Biology & Society: Ethical and Professional Aspects	WBLS19033
Self-organisation of ecological and social systems	WLB07103	Self-organisation of ecological and social systems	WBLS19046
Structural Biology	WLB07079	Medical structural biology	WBLS19005
Systems ecology	WLB0706	Systems ecology & Ecological interactions (5 out of 10 ECTS)	WBLS19007
Thermodynamics, Kinetics & Enzymology	WLB07011	Enzymology and Thermodynamics	WBLS19036