Comparison table for tentatively choosing the right programme

	Applied Biotechnology	<u>Bioinformatics</u>	Biology	Molecular Biotechnology
Unique contents and characteristics Compulsory elements	Interdisciplinary with elements of biology, biotechnology, chemistry as well as business management and economics. Two alternative specialisations to choose from during the second year. 1st year fixed curriculum of compulsory courses. 30 or 45 hp degree project towards the end of the second year.	The programme is interdisciplinary with elements of biology, computer science and mathematics. 1st year fixed curriculum of compulsory courses. 30 or 45 hp degree project towards the end of the second year.	Nine different specialisations to chose from, each with recommended sets of profile courses. However, even within each specialisation there is a large element of free choice. The nine specialisations start with different 15 hp compulsory courses. Each specialisation then has additional recommended courses (different for each specialisation). This and the large variety of	Emphasis lies on quantitative aspects of biology/biotechnology and their interplay with areas such as medicine, biochemistry, biophysics, computer science, etc. 1st year fixed curriculum of compulsory courses. 30 or 45 hp degree project towards the end of the second year.
			elective courses open up for a great deal of flexibility of the programme as a whole. 30 or 45 hp degree project towards the end of the second year.	
Summary of Prerequisites (NB! Before applying: check full details under each programme!)	Bachelor in molecular biology, biology, biochemistry, bioinformatics, biotechnology, chemistry, medical technology/informatics, pharmacy or biophysics. Degree should include: - Knowledge and practical experience of laboratory experiments in biology, and molecular biology: cell biology, molecular biology and molecular genetics corresponding to approximately 20 weeks full-time studies. - Knowledge and practical experience of laboratory experiments in chemistry: general chemistry, organic chemistry and biochemistry corresponding to approximately 20 weeks full-time studies. - Knowledge in mathematics: algebra and analysis corresponding to approximately 10 weeks full-time studies. - Knowledge in computer science: good proficiency in use of computer software for word and simple calculations.	A degree at Bachelor level or higher in the area of natural sciences (biology, chemistry, earth sciences, physics), computer science, mathematics, pharmacology, or medicine. Degree should include: - Mathematics: Algebra, analysis, calculus, differential equations, mathematical statistics, corresponding to about 20 weeks of full-time studies. - Computer sciences: Numerical methods, algorithms, data structures and programming, corresponding to about 20 weeks of full-time studies. Please note, albeit there is no formal requirement of biology and chemistry, it will be difficult for students without any university courses in biology and chemistry to follow the programme.	The basic admission requirement for the programme is a degree at bachelor's level or higher. For the specialisations in - Cell and Molecular Biology - Environmental Toxicology - Genetical and Molecular Plant Science - Immunology and Infection Biology the decree must include 40 weeks of full-time studies (60 ECTS) in Biology plus 20 weeks of full-time studies (30 ECTS) in Chemistry. For the specialisations in - Ecocatch - Ecology and Conservation - Evolutionary Biology - Limnology the decree must include 60 weeks of full-time studies (90 ECTS) in Biology, or 40 weeks of full-time studies (60 ECTS) in Biology plus 20 weeks of full-time studies (30 ECTS) in Biology, with a Sciences. We also have an Erasmus Mundus Master programme in Evolutionary Biology, with a separate application procedure (see details under programme).	Bachelor's degree in any of the natural sciences, medicine, pharmacy, computer science, engineering, mathematics. Degree should include: - Knowledge and practical experience of laboratory experiments in biology, and molecular biology: cell biology, molecular biology and molecular genetics corresponding to approximately 20 weeks full-time studies. - Knowledge and practical experience of chemistry: general chemistry, organic chemistry and biochemistry corresponding to approximately 20 weeks full-time studies. - Knowledge in mathematics (e.g. algebra, analysis, differential equations and mathematical statistics) corresponding to approximately 20 weeks full-time studies. - Knowledge in computer science: good proficiency in use of computer software for words and simple calculations.
Acquired degree	Master of Science in Applied Biotechnology	Master of Science in Bioinformatics	Master of Science in Biology: diploma supplement specifies specialisation.	Master of Science in Molecular Biotechnology
Career opportunities	Applied aspects of biotechnology. Entrepreneurship, R&D in Biotech industry. PhD studies.	Informatician/bioinformatician in research, industry or public sector. PhD studies.	Academia, basic or applied research, industry, public sector. Much depends on your precise specialisation and curriculum! PhD studies.	Academia, basic or applied research, industry, public sector. PhD studies.

Important Notes:

- 1) Please note that the above simplified information is only intended to serve as a first, tentative guide for directing your choice. It is of course essential that you also study in detail all information available for your possible alternatives and then choose it/them in the order of your preferences!
- 2) If you are interested in either of <u>Applied Biotechnology</u>, <u>Molecular Biotechnology</u> or <u>Biology</u>: <u>specialization Cell and Molecular Biology</u>, it is particularly important that you compare these programmes thoroughly, with regard to prerequisites vs. your own background, your wishes and intentions vs. the detailed programme information. It is important for you to do so in order to be able to make an informed and prioritized choice among them!
- 3) If you are not quite sure if you fulfill the requirements for the programme of your first choice, please note that you are entitled to apply for up to four different programmes, in the order that you prioritize them.
- 4) All of the above degrees can serve as firm foundations for careers in academic research (for instance via continued PhD studies) as well as for careers in companies and the public sector. The precise curriculum and personal initiative will matter the most for what kinds of careers will be possible. To some extent though, the different programmes are geared to be slightly more suitable for certain career goals. It is these simplified alternatives that are stated in the above table.