

**Table I Bachelor Cross-Border Joint Study in Bioinformatics - Study Plan**

<b>28 ECTS</b> Area of Specialisation	<b>Computer Science</b>	<b>ECTS</b>	<b>Mathematics</b>	<b>ECTS</b>	<b>Bioinformatics &amp; Machine Learning</b>	<b>ECTS</b>	<b>Chemistry</b>	<b>ECTS</b>	<b>Biology</b>	<b>ECTS</b>	<b>Soft Skills</b>	<b>ECTS</b>	<b>Total ECTS (mandatory courses)</b>	<b>Notes</b>
<b>1.</b>	Python Basics Algorithms and Data Structures	4 4	Calculus I Linear Algebra	6 3					Molecular Biology and Genetics Biology of microorganisms	3 5	Ethics	3	<b>28</b>	Budweis
<b>2.</b>	Applied Programming	3	Calculus II Statistic Essentials	5 3	Introduction to Bioinformatics	6	General Chemistry	3	Diversity of life Introduction to Genomics	5 3	Academic Writing for Cross Border Studies	3	<b>31</b>	Budweis
<b>3.</b>	Information Systems	3			Topics in Genetics & Evolution Sequence Analysis and Phylogenetics	3 6	Bioanalytics I (L + E) Chemistry for Physicist II	4.5 3			English for Chemistry I	3	<b>22.5</b>	Linz
<b>4.</b>	Introduction to R Software Engineering	3 3			Genome Analysis & Transcriptomics Structural Bioinformatics	3 3	Biochemistry	3			Gender Studies English for Chemistry II	3 2	<b>20</b>	Linz
<b>5.</b>	Parallel Programming	4	Biostatistics	5	Bioinformatics Project	8	Methods and Appl. of Molecular Modelling	4	Molecular Phylogenetics	4			<b>25</b>	Budweis / Linz
<b>6.</b>	Information Systems for Bioinformatics	6			Artificial Intelligence L Artificial Intelligence E	3 1.5					Bachelor Thesis +Seminar	6	<b>16.5</b>	Linz / Budweis
<b>Total ECTS mandatory courses</b>		<b>30</b>		<b>22</b>		<b>33.5</b>		<b>17.5</b>		<b>20</b>		<b>20</b>	<b>143</b>	<b>9 ECTS</b> Free Electives