

BSc in Data Science & AI Courses

Academic Program Structure:

<p>➤ Table 1 University Requirements</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>English Intermediate</td><td style="text-align: center;">3</td></tr> <tr><td>English Upper - Intermediate</td><td style="text-align: center;">3</td></tr> <tr><td>English Advanced</td><td style="text-align: center;">3</td></tr> <tr><td>Soft Skills I</td><td style="text-align: center;">2</td></tr> <tr><td>Entrepreneurship Bootcamp</td><td style="text-align: center;">6</td></tr> <tr><td>Leadership Camp</td><td style="text-align: center;">1</td></tr> <tr><td>Group A</td><td style="text-align: center;">4</td></tr> <tr><td>Group B</td><td style="text-align: center;">1</td></tr> <tr><td>Group B</td><td style="text-align: center;">1</td></tr> <tr><td>Group B</td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">25 CH</td></tr> </table> <p>➤ Table 2 College Requirements</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Functional Math</td><td style="text-align: center;">3</td></tr> <tr><td>Maths for Computing</td><td style="text-align: center;">3</td></tr> <tr><td>Fundamentals of Computing</td><td style="text-align: center;">4</td></tr> <tr><td>Programming</td><td style="text-align: center;">3</td></tr> <tr><td>Discrete Mathematics</td><td style="text-align: center;">3</td></tr> <tr><td>Professional Practice</td><td style="text-align: center;">3</td></tr> <tr><td>Managing a Successful Computing Project</td><td style="text-align: center;">3</td></tr> <tr><td>STEM Lab I</td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">23 CH</td></tr> </table>	English Intermediate	3	English Upper - Intermediate	3	English Advanced	3	Soft Skills I	2	Entrepreneurship Bootcamp	6	Leadership Camp	1	Group A	4	Group B	1	Group B	1	Group B	1	Total	25 CH	Functional Math	3	Maths for Computing	3	Fundamentals of Computing	4	Programming	3	Discrete Mathematics	3	Professional Practice	3	Managing a Successful Computing Project	3	STEM Lab I	1	Total	23 CH	<p>➤ Table 3 Data Science & AI Courses</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Networking</td><td style="text-align: center;">3</td></tr> <tr><td>Data Analytics</td><td style="text-align: center;">3</td></tr> <tr><td>Data Structures & Algorithms</td><td style="text-align: center;">3</td></tr> <tr><td>Business Intelligence</td><td style="text-align: center;">3</td></tr> <tr><td>Data Mining</td><td style="text-align: center;">3</td></tr> <tr><td>Operating Systems</td><td style="text-align: center;">3</td></tr> <tr><td>Data Science Programming</td><td style="text-align: center;">3</td></tr> <tr><td>Computing Research Project</td><td style="text-align: center;">6</td></tr> <tr><td>Database Design & Development</td><td style="text-align: center;">3</td></tr> <tr><td>Security</td><td style="text-align: center;">3</td></tr> <tr><td>Machine Learning</td><td style="text-align: center;">3</td></tr> <tr><td>Artificial Intelligence</td><td style="text-align: center;">3</td></tr> <tr><td>Big Data</td><td style="text-align: center;">3</td></tr> <tr><td>Principles of Data Science</td><td style="text-align: center;">3</td></tr> <tr><td>Modeling and Simulation</td><td style="text-align: center;">3</td></tr> <tr><td>Data Visualization</td><td style="text-align: center;">3</td></tr> <tr><td>Natural Language Processing</td><td style="text-align: center;">3</td></tr> <tr><td>Deep Learning</td><td style="text-align: center;">3</td></tr> <tr><td>Elective I</td><td style="text-align: center;">3</td></tr> <tr><td>Elective II</td><td style="text-align: center;">3</td></tr> <tr><td>Elective III</td><td style="text-align: center;">3</td></tr> <tr><td>Capstone project I</td><td style="text-align: center;">1</td></tr> <tr><td>Capstone project II</td><td style="text-align: center;">2</td></tr> <tr><td>Apprenticeship Training</td><td style="text-align: center;">18</td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">87 CH</td></tr> </table>	Networking	3	Data Analytics	3	Data Structures & Algorithms	3	Business Intelligence	3	Data Mining	3	Operating Systems	3	Data Science Programming	3	Computing Research Project	6	Database Design & Development	3	Security	3	Machine Learning	3	Artificial Intelligence	3	Big Data	3	Principles of Data Science	3	Modeling and Simulation	3	Data Visualization	3	Natural Language Processing	3	Deep Learning	3	Elective I	3	Elective II	3	Elective III	3	Capstone project I	1	Capstone project II	2	Apprenticeship Training	18	Total	87 CH
English Intermediate	3																																																																																										
English Upper - Intermediate	3																																																																																										
English Advanced	3																																																																																										
Soft Skills I	2																																																																																										
Entrepreneurship Bootcamp	6																																																																																										
Leadership Camp	1																																																																																										
Group A	4																																																																																										
Group B	1																																																																																										
Group B	1																																																																																										
Group B	1																																																																																										
Total	25 CH																																																																																										
Functional Math	3																																																																																										
Maths for Computing	3																																																																																										
Fundamentals of Computing	4																																																																																										
Programming	3																																																																																										
Discrete Mathematics	3																																																																																										
Professional Practice	3																																																																																										
Managing a Successful Computing Project	3																																																																																										
STEM Lab I	1																																																																																										
Total	23 CH																																																																																										
Networking	3																																																																																										
Data Analytics	3																																																																																										
Data Structures & Algorithms	3																																																																																										
Business Intelligence	3																																																																																										
Data Mining	3																																																																																										
Operating Systems	3																																																																																										
Data Science Programming	3																																																																																										
Computing Research Project	6																																																																																										
Database Design & Development	3																																																																																										
Security	3																																																																																										
Machine Learning	3																																																																																										
Artificial Intelligence	3																																																																																										
Big Data	3																																																																																										
Principles of Data Science	3																																																																																										
Modeling and Simulation	3																																																																																										
Data Visualization	3																																																																																										
Natural Language Processing	3																																																																																										
Deep Learning	3																																																																																										
Elective I	3																																																																																										
Elective II	3																																																																																										
Elective III	3																																																																																										
Capstone project I	1																																																																																										
Capstone project II	2																																																																																										
Apprenticeship Training	18																																																																																										
Total	87 CH																																																																																										

List of Elective Courses (9 CH):

Analytical Methods	3
Applied Analytical Models	3
Pattern Recognition	3
Computer Vision	3
Cloud Computing	3
Robotics	3
Special Topics in Data Science and AI	3