

BS in Data Science and General Education Requirements – 121 credits

| General Education (GE) (13 courses, plus one QS and one SS from core) | DS Major Core (18 courses, 58 credits) | Business Analytics (BA) Track (3 courses +2 Track Electives, 15 credits) | Free Electives (3 courses, 9 credits) | | | |
|--|---|--|---|---|---|---|
| <p style="text-align: center;"><u>Foundation Requirements</u> (6 courses, 18 credits)</p> <p>Freshman Seminar I Freshman Seminar II Armenian Language/Literature I Armenian Language/Literature II Armenian History I Armenian History II</p> <p style="text-align: center;"><i>All undergraduate students must take these 6 courses</i></p> | <p>Single Variable Calculus (4) Multi Variable Calculus (4) Linear Algebra & Ordinary Differential Equations (4) Data Visualization Discrete Math Probability Statistics 1 Statistics 2 Numerical Analysis Introduction to Computer Science Programming for Data Science Data Structures/Algorithms for Data Science (4) Machine Learning Artificial Intelligence Databases and Distributed Systems Physics & Chemistry in Life Sciences Intro to Business Capstone</p> | <p><u>Track Requirements</u> (3 courses) Business Intelligence Time Series Forecasting Analytics for Decision Making</p> <p><u>Track Electives</u> (2 courses from following) <i>Business Data Management</i> <i>Marketing Analytics</i> <i>eCommerce</i> <i>Stochastic Modeling</i></p> | <p style="text-align: center;">(3 courses, 9 credits)</p> <p style="text-align: center;"><i>Any three additional courses offered at AUA</i></p> | | | |
| <p style="text-align: center;"><u>Quantitative Science Requirements</u> (2 courses, 6 credits, + core course Physics & Chemistry in Life Sciences)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p style="text-align: center;">BA Track</p> <p>Two courses coded as GE-QS, as a cluster</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p style="text-align: center;">BI Track</p> <p>Cell & Molecular Biology ----- + one upper QS course as a cluster</p> </td> </tr> </table> | | <p style="text-align: center;">BA Track</p> <p>Two courses coded as GE-QS, as a cluster</p> | | <p style="text-align: center;">BI Track</p> <p>Cell & Molecular Biology ----- + one upper QS course as a cluster</p> | <u>A</u> <u>N</u> <u>D</u> | <u>A</u> <u>N</u> <u>D</u> |
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| <p style="text-align: center;"><u>Social Science Requirements</u> (2 courses, 6 credits, + core course Intro to Business)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p style="text-align: center;">BA Track</p> <p>Financial Accounting & Analysis ----- + one upper SS course as a cluster</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p style="text-align: center;">BI Track</p> <p>Two courses coded as GE-SS, as a cluster</p> </td> </tr> </table> | | <p style="text-align: center;">BA Track</p> <p>Financial Accounting & Analysis ----- + one upper SS course as a cluster</p> | | <p style="text-align: center;">BI Track</p> <p>Two courses coded as GE-SS, as a cluster</p> | <u>A</u> <u>N</u> <u>D</u> | <u>A</u> <u>N</u> <u>D</u> |
| <p style="text-align: center;">BA Track</p> <p>Financial Accounting & Analysis ----- + one upper SS course as a cluster</p> | <p style="text-align: center;">BI Track</p> <p>Two courses coded as GE-SS, as a cluster</p> | | | | | |
| <p style="text-align: center;"><u>Arts & Humanities Requirements</u> (3 courses, 9 credits)</p> <p>Three courses coded as GE-AH, as a cluster</p> | <u>A</u> <u>N</u> <u>D</u> | <u>A</u> <u>N</u> <u>D</u> | <u>A</u> <u>N</u> <u>D</u> | | | |
| | | <p><u>OR</u></p> <p style="text-align: center;">Bioinformatics (BI) Track (3 courses + 2 Track Electives, 15 credits)</p> <p><u>Track Requirements</u> (3 courses) Introduction to Bioinformatics Computational Biology Systems Biology</p> <p><u>Track Electives</u> (2 courses from following) <i>Functional Genomics</i> <i>Bioinformatics Algorithms</i> <i>Structural Modeling</i> <i>Biotechnology</i></p> | | | | |