Ateneo de Davao University

School of Arts and Sciences Curriculum Effective 2020 - 2021 Bachelor of Science in Data Science

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| | Description | Units | | |
|---------------------------------------|---|------------|------------|--------------------|
| Course# De | | Pay | Credit P | rof Pre-requisites |
| 1st Year, 1st | Semester | | | |
| ASF 1102 | NATIONAL SERVICE TRAINING PROGRAM - CIVIC WELFARE | 0.0 | 3.0 | |
| ASF 1000 | ARRUPE SOCIAL FORMATION 0 | 2.0 | 2.0 | |
| ASF 1101 | ARRUPE SOCIAL FORMATION 1 | 2.0 | 2.0 | |
| GE 1105 | UNDERSTANDING THE SELF | 3.0 | 3.0 | |
| GE 1106 | PURPOSIVE COMMUNICATION | 3.0 | 3.0 | |
| Philo 1000 | PHILOSOPHY | 3.0 | 3.0 | |
| GE 1108 | MATHEMATICS IN THE MODERN WORLD | 3.0 | 3.0 | |
| PE 1114 | PATH-FIT I | 2.0 | 2.0 | |
| DSC 1130 | INTRODUCTION TO COMPUTING | 0.0 | 3.0 | |
| DSC 1131 | COMPUTER PROGRAMMING 1 | 5.0 | 3.0 | |
| | Total Number of Un | its | 27.0 | |
| 1st Year, 2nd | d Semester | | | |
| DSC 1232 | DISCRETE STRUCTURES 1 | 0.0 | 3.0 | |
| DSC 1233 | COMPUTER PROGRAMMING 2 | 0.0 | 3.0 | DSC 1131 |
| GE 1210 | READINGS IN PHILIPPINE HISTORY | 3.0 | 3.0 | 250 1.6. |
| GE 1211 | THE CONTEMPORARY WORLD | 3.0 | 3.0 | |
| GE 1212 | SCIENCE, TECHNOLOGY AND SOCIETY | 3.0 | 3.0 | |
| ASF 1203 | NATIONAL SERVICE TRAINING PROGRAM - CIVIC WELFARE | 0.0 | 3.0 | ASF 1102 |
| PE 1215 | PATH-FIT II | 2.0 | 2.0 | PE 1114 |
| Theo 1000 | THEOLOGY | 3.0 | 3.0 | |
| MATH 2171 | DIFFERENTIAL CALCULUS | 5.0 | 5.0 | |
| | Total Number of Un | ite | 28.0 | |
| 2nd Year, 1s | | iito | 20.0 | |
| | | 0.0 | 0.0 | OF 4400 |
| MATH 2138 MATH 2272 | LINEAR ALGEBRA | 3.0 5.0 | 3.0 5.0 | GE 1108 |
| GE 3118 | INTEGRAL CALCULUS ELECTIVE 1 | 3.0 | 3.0 | MATH 2171 |
| GE 1109 | ETHICS | 3.0 | 3.0 | |
| GE 1109 | ART APPRECIATION | 3.0 | 3.0 | |
| PE 2116 | PATH-FIT III | 2.0 | 2.0 | PE 1114 |
| DSC 2134 | INFORMATION MANAGEMENT AND DATABASES | 0.0 | 3.0 | DSC 1233 |
| DSC 2134 DSC 2135 | OBJECT ORIENTED PROGRAMMING | 0.0 | 3.0 | DSC 1233 |
| D3C 2133 | OBJECT ORIENTED PROGRAMIMING | 0.0 | <u> </u> | D3C 1233 |
| | Total Number of Un | its | 25.0 | |
| 2nd Year, 2n | d Semester | | | |
| DSC 2236 | LINEAR MODELS | 0.0 | 3.0 | MATH 2138 |
| DSC 2237 | BUSINESS INTELLIGENCE | 0.0 | 3.0 | |
| DSC 2238 | DATA SCIENCE FUNDAMENTALS | 0.0 | 3.0 | |
| DSC 2239 | DATA STRUCTURES AND ALGORITHMS | 0.0 | 3.0 | DSC 1232, DSC 1233 |
| PE 2217 | PATH-FIT IV | 2.0 | 2.0 | PE 1114 |
| GE 1213 | LIFE AND WORKS OF RIZAL | 3.0 | 3.0 | |
| GE 3219 | ELECTIVE 2 | 3.0 | 3.0 | |
| MATH 3274 | PROBABILITY AND STATISTICS | 0.0 | 3.0 | MATH 2272 |
| DSC 2240 | PHYSICS FOR COMPUTING | 0.0 | 5.0 | |
| | Total Number of Un | its | 28.0 | |
| | | | | |
| 3rd Year, 1st | | | | |
| | FLECTIVE 3 | 3.0 | 3.0 | |
| 3rd Year, 1st GE 4120 DSC 3140 | ELECTIVE 3 NONLINEAR MODELS | 3.0 0.0 | 3.0 5.0 | DSC 2236 |

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|---------------|---|----------|-------------|-------------------|
| Course# | Description | Pay | Credit Prof | Pre-requisites |
| DSC 3242 | DATA VISUALIZATION | 0.0 | 3.0 | DSC 2238 |
| DSC 3143 | ALGORITHMS AND COMPLEXITY | 0.0 | 3.0 | DSC 2239 |
| DSC 3144 | DS ELECTIVE 1 | 0.0 | 3.0 | |
| DSC 3145 | INTRODUCTION TO ARTIFICIAL INTELLIGENCE | 0.0 | 3.0 | |
| | Total Number o | of Units | 23.0 | |
| 3rd Year, 2n | d Semester | | | |
| DSC 3246 | SOFTWARE ENGINEERING | 0.0 | 3.0 | DSC 2135 |
| DSC 3247 | MULTIVARIATE STATISTICS | 0.0 | 3.0 | MATH 3274 |
| DSC 3248 | MACHINE LEARNING 2 | 0.0 | 3.0 | DSC 3141 |
| DSC 3249 | DATA WAREHOUSING | 0.0 | 3.0 | |
| DSC 3250 | PROGRAMMING PARADIGMS AND LANGUAGES | 0.0 | 3.0 | |
| DSC 3251 | DS THESIS WRITING 1 | 0.0 | 3.0 | |
| | Total Number o | of Units | 18.0 | |
| 3rd Year, Su | mmer | | | |
| DSC 3352 | DS PRACTICUM | 0.0 | 3.0 | DSC 3246 |
| | Total Number o | of Units | 3.0 | |
| 4th Year, 1st | Semester | | | |
| DSC 4153 | DS ELECTIVE 2 | 0.0 | 3.0 | |
| DSC 4154 | APPLICATIONS DEVELOPMENT AND EMERGING | 0.0 | 3.0 | |
| DSC 4156 | DS ELECTIVE 3 | 0.0 | 3.0 | |
| DSC 4157 | WORKING WITH BIG DATA | 0.0 | 3.0 | DSC 2238 |
| DSC 4155 | DS THESIS WRITING 2 | 0.0 | 3.0 | DSC 3246 |
| | Total Number o | of Units | 15.0 | |
| 4th Year, 2nd | d Semester | | | |
| ASF 4204 | SENIORS' INTEGRATION PROGRAM | 0.0 | 2.0 | |
| DSC 4258 | DS ELECTIVE 4 | 0.0 | 3.0 | |
| DSC 4259 | INTELLIGENT SYSTEMS | 0.0 | 3.0 | DSC 3145 |
| DSC 4260 | MODELING AND SIMULATION | 0.0 | 3.0 | DSC 3145 |
| DSC 4261 | SOCIAL ISSUES AND PROFESSIONAL PRACTICE | 0.0 | 3.0 | GE 1109, DSC 3352 |
| | Total Number o | of Units | 14.0 | |

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