2019-2020 TTC Catalog

Associate in Science

Associate in Science

60 Credit Hours

The Associate in Science degree is designed for students planning to transfer to fouryear programs and for students who wish to broaden their general knowledge. The degree stresses mathematics and natural and physical sciences.

English Requirement

ENG 101 English Composition I 3 ENG 102 English Composition II 3

Total: 6

Core Math Requirement

Select two courses from the following. Because of duplicated content, some courses cannot be taken together, such as MAT 110 and MAT 109. See course descriptions for restrictions before selecting mathematics courses.

MAT 109 College Algebra with Modeling 3 MAT 110 College Algebra 3 MAT 111 College Trigonometry 3 MAT 112 Precalculus 5 MAT 120 Probability and Statistics 3 MAT 120 Probability and Statistics 3 MAT 130 Elementary Calculus 3 MAT 140 Analytic Geometry and Calculus I 4 MAT 141 Analytic Geometry and Calculus II 4 MAT 240 Analytic Geometry and Calculus III 4 MAT 240 Differential Equations 4

Total: 6-9

Social Science Requirement

REQ SSC

Select from 3 Behavioral/Social Sciences

or

Total: 3

Oral Communication Requirement

Select one course from the following.

SPC 205 Public Speaking 3 SPC 209 Interpersonal Communication 3 SPC 210 Oral Interpretation of Literature 3 THE 101 Introduction to Theater 3

Total: 3

First Year Experience Requirement

IDS 109 First Year Experience Seminar 3

Total: 3

Lab Science Requirement

Select one course from the following.

AST 101 Solar System Astronomy 4 BIO 101 Biological Science I 4 BIO 210 Anatomy and Physiology I 4 BIO 225 Microbiology 4 CHM 110 College Chemistry I 4 CHM 211 Organic Chemistry I 4 PHY 201 Physics I 4 PHY 221 University Physics I 4

Total: 4

Additional Math/Science Requirement

Take an additional 14 credit hours from the following. Courses applied to the categories above cannot be used to meet this requirement.

AST 101 Solar System Astronomy 4 AST 102 Stellar Astronomy 4 BIO 101 Biological Science I 4 BIO 102 Biological Science II 4 BIO 210 Anatomy and Physiology I 4 BIO 211 Anatomy and Physiology II 4 BIO 225 Microbiology 4 CHM 110 College Chemistry I 4 CHM 111 College Chemistry II 4 CHM 211 Organic Chemistry I 4 CHM 212 Organic Chemistry II 4 MAT 109 College Algebra with Modeling 3 MAT 110 College Algebra 3 MAT 111 College Trigonometry 3 MAT 112 Precalculus 5 MAT 120 Probability and Statistics 3 MAT 130 Elementary Calculus 3 MAT 140 Analytic Geometry and Calculus I 4 MAT 141 Analytic Geometry and Calculus II 4 MAT 240 Analytic Geometry and Calculus III 4 MAT 242 Differential Equations 4 PHY 201 Physics I 4

PHY 202 Physics II 4 PHY 221 University Physics I 4 PHY 222 University Physics II 4

Total: 14

Humanities Requirement

Take one course from the following.

ART 101 Art History and Appreciation 3 ART 105 Film as Art 3 ART 107 History of Early Western Art 3 ART 108 History of Western Art 3 ART 210 History of Graphic Design 3 ENG 203 American Literature Survey 3 ENG 205 English Literature I 3 ENG 206 English Literature II 3 ENG 208 World Literature I 3 ENG 209 World Literature II 3 ENG 214 Fiction 3 HIS 101 Western Civilization to 1689 3 HIS 102 Western Civilization Post 1689 3 HIS 104 World History I 3 HIS 105 World History II 3 HIS 201 American History: Discovery to 1877 3 HIS 202 American History - 1877 to Present 3 HSS 110 History of Ideas 3 MUS 105 Music Appreciation 3 PHI 101 Introduction to Philosophy 3 PHI 105 Introduction to Logic 3 PHI 110 Ethics 3 **REL 101 Introduction to Religion 3** THE 101 Introduction to Theater 3

Total: 3

Humanities/Social Sciences/Languages Requirement

Select 6 credits from the Humanities courses above or from the following Behavioral/ Social Sciences and Languages courses below. Courses cannot be applied to more than one category.

ANT 101 General Anthropology 3 ECO 210 Macroeconomics 3 ECO 211 Microeconomics 3 FRE 101 Elementary French I 4 FRE 102 Elementary French II 4 FRE 201 Intermediate French I 3 FRE 202 Intermediate French II 3 PSC 201 American Government 3 PSC 215 State and Local Government 3 PSC 220 Introduction to International Relations 3 PSY 201 General Psychology 3 PSY 203 Human Growth and Development 3 PSY 212 Abnormal Psychology 3 SOC 101 Introduction to Sociology 3 SOC 102 Marriage and the Family 3 SOC 205 Social Problems 3 SPA 101 Elementary Spanish I 4 SPA 102 Elementary Spanish I 4 SPA 201 Intermediate Spanish I 3 SPA 202 Intermediate Spanish II 3

Total: 6

General Electives

Add up all credits generated by courses in the categories above, and take enough additional credits to add up to a minimum of 60 hours. Electives can include additional courses from the categories above and courses on the list below. No course can count in more than one category.

ACC 101 Accounting Principles I 3 ACC 102 Accounting Principles II 3 BUS 101 Introduction to Business 3 BUS 121 Business Law I 3 CRJ 101 Introduction to Criminal Justice 3 **CWE Cooperative Work Experience *** ECE 205 Electrical and Computer Lab I 3 ECE 221 Introduction to Electrical Engineering I 3 ECE 222 Introduction to Electrical Engineering II 3 EGR 202 Introduction to Engineering Programming 3 EGR 260 Engineering Statics 3 EGR 262 Engineering Dynamics 3 EGR 269 Engineering Disciplines and Skills 2 EGR 273 Problem Solving for Engineers 2 EGR 275 Introduction to Engineering/Computer Graphics 3 EGR 282 Introduction to Civil Engineering 2 EGR 285 Engineering Surveying I 3 EGR 286 Engineering Surveying II 3 EGR 295 Engineering Surveying Lab I 1 EGR 296 Engineering Surveying Lab II 1 EVT 101 Man and His Environment 3 GEO 102 World Geography 3 HIS 106 Introduction to African History 3 HIS 130 African-American History to 1877 3 HIS 131 African-American History: 1877 to Present 3 JOU 101 Journalism 3 MAT 123 Contemporary College Mathematics 3 MGT 101 Principles of Management 3

MGT 201 Human Resource Management 3 MKT 101 Marketing 3

Total: 6-12

Admission Requirements

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.