

APPROVED SCIENCE, MATH, AND BUSINESS ELECTIVES LIST FOR BS-ME or BS-ESE STUDENTS

Note: Electives are governed by the approved list in effect at the time course is taken. Students should check the current list before enrolling in a course to confirm that the course is an approved elective.

COMMONLY SELECTED SCIENCE ELECTIVES

ASTR 2310 General Astronomy I (4)	PHYS 1210 Engineering Physics I (4) (if taken prior to ES 2120)
ATSC 2100 Global Warming (3)	PHYS 1310 College Physics I (4) (if taken prior to ES 2120)
CHEM 1030 General Chemistry II (4)	PHYS 2310 Physics III: Waves and Optics (4)
GEOL 1100 Physical Geology (4)	PHYS 2320 Physics IV: Modern Physics (3)
LIFE 1003 Current Issues in Biology (4)	
LIFE 1010 General Biology (4)	

COMMONLY SELECTED MATH ELECTIVES

MATH 2250 Elementary Linear Algebra (3)	MATH 4440 Partial Differential Equations I (3)
MATH 4300 Intro to Mathematical Modeling (3)	STAT 4220 Basic Engineering Statistics (3)

COMMONLY SELECTED BUSINESS ELECTIVES

DSCI 3210 Product and Operations Management (3)	CE 3900 Engineering Econ and Decision Making (3)
DSCI 4260 Project Management (3)	ES 4910 Survey of Engineering Management (3)

ADDITIONAL APPROVED SCIENCE ELECTIVES

ASTRONOMY:

ASTR 2320 General Astronomy II (4)

ATMOSPHERIC SCIENCE:

ATSC 3032 Weather Analysis and Forecasting (3)
ATSC 4001 Modeling the Earth System (4)
ATSC 4010 Atmospheric Processes I (3)
ATSC 4031 Atmospheric Dynamics I (3)
ATSC 4033 Atmospheric Remote Sensing (3)
ATSC 4035 Atmospheric Processes II (3)
ATSC 4320 The Ocean Environment (3)
ATSC 4400 The Physical Basis of Climate (3)
ATSC 4410 Introduction to Micrometeorology (3)

CHEMISTRY:

CHEM 1060 Gen. Chem. & Quant. Analysis II (4)
CHEM 2230 Quantitative Analysis (4)
CHEM 2300 Introductory Organic Chemistry (4)
CHEM 2420 Organic Chemistry I (4)
CHEM 2440 Organic Chemistry II (4)
CHEM 3020 Environmental Chemistry (3)
CHEM 4507 Physical Chemistry I (3)
CHEM 4508 Physical Chemistry II (3)

GEOLOGY:

GEOL 2010 Mineralogy (3)
GEOL 2020 Intro to Petrology (2)
GEOL 2050 Principles of Paleontology (3)
GEOL 2070 Intro to Oceanography (4)
GEOL 2100 Stratigraphy and Sedimentation (4)
GEOL 2150 Geomorphology (4)
GEOL 3005 Principles of Geophysics (4)
GEOL 4000 Paleomagnetism in Geol./Geophys. (3)
GEOL 4001 Modeling the Earth System (4)
GEOL 4025 Igneous and Metamorphic Petrology (4)
GEOL 4030 Grndwat. Flow and Sol. Trans. Mod. (3)

GEOL 4050 Geology of Wyoming (3)

GEOL 4113 Geological Remote Sensing (4)

GEOL 4125 Igneous Petrology (2)

GEOL 4190 Petroleum Geology (3)

GEOL 4280 Paleobotany (4)

LIFE SCIENCE:

LIFE 2002 Global Ecology (3)
LIFE 2022 Animal Biology (4)
LIFE 2023 Biology for Plants and Fungi (4)
LIFE 2050 Biol. of Aging and Human Devel. (3)
LIFE 3050 Genetics (3)
LIFE 3400 General Ecology (3)
LIFE 3410 Introduction to Field Ecology (2)
LIFE 3500 Evolutionary Biology (3)
LIFE 3600 Cell Biology (3)

MOLECULAR BIOLOGY:

MOLB 2021 General Microbiology (4)
MOLB 2240 Medical Microbiology (4)
MOLB 3000 Intro to Molecular Biology (3)
MOLB 3610 Principles of Biochemistry (4)
MOLB 4440 Microbial Genetics (3)

PHYSICS:

PHYS 4000 Applied Laser Science (3)
PHYS 4210 Classical Mechanics (3)
PHYS 4220 Classical Mechanics II (4)
PHYS 4310 Quantum Mechanics (3)
PHYS 4340 Semiconductor Mat'ls and Devices (3)
PHYS 4350 Advanced Quantum Mechanics (3)
PHYS 4410 Electricity and Magnetism I (3)
PHYS 4420 Electricity and Magnetism II (3)
PHYS 4510 Thermo. and Statistical Mechanics (3)
PHYS 4710 Solid State Physics (3)

ADDITIONAL APPROVED MATH ELECTIVES

MATH 3205 Elementary Real Analysis (3)	MATH 4255 Mathematical Theory of Probability (3)
MATH 3310 Applied Differential Equations II (3)	MATH 4265 Introduction to Theory of Statistics (3)
MATH 3500 Algebra I: Intro to Rings and Proofs (3)	MATH 4340 Numerical Methods for Ord. and Partial Diff. Eq. (3)
MATH 3700 Combinatorics (3)	MATH 4500 Matrix Theory (3)
MATH 4200 Advanced Analysis (3)	
MATH 4230 Introduction to Complex Analysis (3)	

ADDITIONAL APPROVED BUSINESS ELECTIVES

ACCOUNTING:

ACCT 1010 Principles of Accounting I (3)
ACCT 1020 Principles of Accounting II (3)
ACCT 2110 Managerial Accounting (3)

DECISION SCIENCE:

DSCI 4250 Revenue Management (3)
DSCI 4280 Supply Chain Management (3)

FINANCE:

FIN 3250 Corporate Finance (3)
FIN 3310 Investment Management (3)
FIN 4250 Advanced Corporate Finance (3)

MANAGEMENT:

MGT 1040 Legal Environment of Business (3)
MGT 2000 Intro. To Business (3)
MGT 3210 Management and Organization (3)

MARKETING:

MKT 3210 Intro to Marketing (3)
MKT 4430 Marketing Management (3)
MKT 4450 Advanced Marketing Management (3)
MKT 4540 International Marketing (3)