

HIBBING COMMUNITY COLLEGE
ASSOCIATE OF SCIENCE IN ENGINEERING
60 credits
2017-2018

GENERAL EDUCATION REQUIREMENTS: 2.0 minimum GPA required for A. S., MnTC, and all degrees.
Transfer courses with grade of A-D will be included in the GPA calculation for MnTC.

GOAL 1: Communication: (3 semester credits minimum)

ENGL 1060 Freshman Composition (3) required

GOAL 3: Natural Science: (15 semester credits minimum)

PHYS 2010 General Physics 1 (5) required

ASTR 1050 (3) Solar Sys Astronomy
BIOL 1050 (3) Human Biology (EN)
BIOL 1270 (4) Hum Anat & Phys I
BIOL 1510 (5) Gen Biol of Cells
BIOL 1120 (3) Microbiology
CHEM 1020 (4) Intro to Chemistry
CHEM 1610 (5) Gen Chem 1
BIOL 1520 (5) Gen Biology of Animals & Plants

PHYS 2021 General Physics 2 (5) required

BIOL 1610 (3) Biology of Women (DI)
GEOL 1010 (3) Physical Geology
BIOL 1280 (4) Hum Anat & Phys II
BIOL 2151 (4) Human Physiology
ENSC 1050 (3) Environ Science (EN)
CHEM 1300 (3) Inv Chem/Forensic Sci
CHEM 1611 (5) Gen Chem 2

GOAL 4: Math/Logical Reasoning: (15 semester credit minimum)

MATH 2101 Calc 1 (5) MATH 2111 Calc 2 (5)
MATH 2121 Calc 3 (5) MATH 2211 Differential Equations (5)
CSCI 1081 Fundamentals of Computer Science (4)

GOAL 5: History/Science/Behavioral Science: (3 semester credits minimum)

ANTH 1010 (3) Cultural Anthro (GL)	ECON 1010 (3) Macroeconomics (GL)
ECON 1030 (3) Intro to Economics (GL)	ECON 1050 (3) Microeconomics
GEOG 1100 (3) Human Geography (GL)	HIST 2300 (3) World War II (DI)
HIST 1055 (3) Europ Hist to 1789 (GL)	HIST 2100 (3) Divided America 1960-1980 (DI)
HIST 1150 (3) Amer Indian History (DI)	HIST 2580 (3) Vietnam War (GL)
HIST 1260 (3) U.S. Hist 1877-pres (DI)	PSYC 1205 (4) General Psychology
HIST 1250 (3) U.S. Hist Explo to 1877 (DI)	PSYC 1350 (3) Lifespan Development
HIST 1060 (3) Europ Hist 1789-pres (GL)	PSYC 1400 (3) Abnormal Psychology
HIST 1300 (3) Hist of Food & Culture (GL)	SOC 1100 (3) Intro to Sociology (DI)
HIST 2200 (3) Minnesota History (DI)	SOC 1200 (3) Social Problems (ET)
PSCI 1100 (3) Amer Gov (ET)	SOC 1300 (3) Criminology (ET)
PSCI 1500 (3) Alternative Spring Break (ET)	SOC 1400 (3) Marriage & Family (DI)
SOC 2200 (3) Race & Ethnicity (DI)	SOC 2300 (3) Soc of Aging (ET)

GOAL 6: Humanities & Fine Arts: (3 semester credits minimum)

Area A: Analysis and Criticism

ART 1010 (3) Intro to Art (GL)	ART 1490 (3) Art Hist to Gothic (GL)	ART 1500 (3) Art Hist to Present (GL)
MUSC 1050 (3) Amer Pop Music (DI)	MUSC 1100 (3) Music Appreciation (GL)	PHIL 1350 (3) Human Nature (GL)
MUSC 1110 (3) Hist of Rock'n Roll (DI)	PHIL 1200 (3) Intro to Philosophy (ET)	
PHIL 1300 (3) Ethics (ET)	HUM 1200 (3) World Religions (GL)	

Area C: Literature Courses

ENGL 1150 (3) Multi Cult Lit (DI)	ENGL 1170 (3) Film (GL)	ENGL 1130 (3) Science Fiction (ET)
ENGL 1190 (3) Lives through Lit (GL)	ENGL 1180 (3) Envir Lit (EN)	ENGL 2220 (3) Amer Lit 1865-1960
ENGL 2120 (3) Eng Lit 1700-1920	ENGL 2210 (3) Amer Lit to 1865	

GOAL 7: Human Diversity (DI) (one course minimum)

ART 1800 (3) Art of Photography	ENGL 1150 (3) Multi Cult Lit	BIOL 1610 (3) Biology of Women
HIST 1250 US Hist Explo to 1877	HIST 1260 (3) U.S. Hist 1877-pres	HIST 2100 (3) Div. America
HIST 2200 (3) Minnesota History	HIST 1150 (3) Amer Indian History	HIST 2300 (3) World War II
MUSC 1050 (3) America's Pop	MUSC 1110 (3) Hist of Rock n Roll	MCS 1071 (3) Amer Indian Art
SOC 1400 (3) Marriage and Family	SOC 2200 (3) Race & Ethnicity	SOC 1100 (3) Intro to Soc

GOAL 8: Global Perspective (GL) (one course minimum)

ANTH 1010 (3) Cult Anthropology	ART 1010 (3) Intro to Art	HIST 1300 (3) Hist of Food & Culture
ECON 1010 (3) Macroeconomics	ART 1490 (3) Art History	ART 1500 (3) Art History
ENGL 1190 (3) Lives through Lit	ECON1030 (3) Intro to Economics	ENGL 1170 (3) Film
HIST 1060 (3) Europ Hist 1789-Present	GEOG 1100 (3) Human Geography	HIST 2580 (3) Vietnam War
HIST 1055 (3) Europ Hist to 1789	MUSC 1100 (3) Music Appreciation	PHIL 1350 (3) Human Nature
HUM 1200 (3) World Religions		

GOAL 9: Ethic and Civic Responsibility (ET) (one course minimum)

PHIL 1200 (3) Intro to Philosophy	PSCI 1100 (3) Amer Gov	ENGL 1130 (3) Science Fiction
PHIL 1300 (3) Ethics	SOC 1200 (3) Social Problems	SOC 1300 (3) Criminology
SOC 2300 (3) Sociology of Aging	PSCI 1500 (3) Alt Spring Break	

GOAL 10: People and the Environment (EN) (one course minimum)

BIOL 1050 (3) Human Biology	BIOL 1520 (5) Gen Biol Animals/Plant	ENSC 1050 (3) Environmental Science
ENGL 1180 (3) Environmental Lit		

Chemistry & Engineering Electives (14 credits minimum)

CHEM 1611 Gen Chemistry 2 (5)	CHEM 2710 Organic Chem 1 (5)
CHEM 2720 Organic Chem 2 (5)	CSCI 1021 Visual Basic Programming 1 (3)
CSCI 1250 C++ Programming (3)	ENGR 1010 Intro to Engineering (2)
ENGR 1030 Intro to Engineering Applications (2)	ENGR 1510 Digital Logic (3)
ENGR 2010 Statics (3)	ENGR 2020 Dynamics
ENGR 2030 Mechanics of Materials (3)	ENGR 2061 Electrical Engineering Fundamentals (4)
ENGR 2071 Linear Electric Circuits (4)	PHYS 2030 Modern Physics (3)