

Missouri University of Science and Technology Dual BS CpE-CS Degree Program

Effective Catalog Year 2021

Year 1		Year 2		Year 3		Year 4		Year 5
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Math 1214 4 hrs	Math 1215 4 hrs	Math 2222 4 hrs	Social Science Elective 3 hrs	Math 3304 3 hrs	Math 3108 3 hrs	Eng Sci Elective 3 hrs	Stat 3117 3 hrs	Comp Eng Elective B 3 hrs
Fresh Eng 1100 1 hr	Humanity Elective 3 hrs	Comp Sci 1575 and 1585 4 hrs	Elec Eng 2100 and 2101 4 hrs	Elec Eng 2120 and Soph Sem 3 hrs	Elec Eng 2200 and 2201 4 hrs	Elec Eng 3410 3 hrs	Comp Sci 5XXX Elective 3 hrs	Comp Eng Sr Proj II 4097 3 hrs
Econ 1100 or 1200 3 hr	Hist 1200 or 1300 or 1310 or Pol Sci 1200 3 hrs	Physics 1135 4 hrs	Physics 2135 4 hrs	Speech 1185 3 hrs	Chem 1310 and 1319 5 hrs	Comp Eng 5410 3 hrs	Comp Eng Sr Proj I 4096 1 hr	Comp Sci 5XXX Elective 3 hrs
Comp Sci 1500 3 hrs	Comp Eng 2210 and 2211 4 hrs	Literature Elective 3 hrs	Comp Eng 3150 and 3151 4 hrs	Comp Sci 2200 3 hrs	Comp Eng 3110 3 hrs	Comp Sci 4610 3 hrs	Phil 3225 3 hrs	Comp Sci 5XXX Elective 3 hrs
Soc Sci Elective 3 hrs	Comp Sci 1570 and 1580 4 hrs	Comp Sci 1200 3 hrs	Comp Sci 2500 3 hrs	Comp Sci 2300 3 hrs	Comp Sci 3800 3 hrs	Comp Sci 3500 3 hrs	Comp Sci 3100 3 hrs	Comp Sci 4091 3 hrs
English 1120 3 hrs						Comm Elective 3 hrs	Comp Sci 4090 3 hrs	
17 hours	18 hours	18 hours	18 hours	15 hours	18 hours	18 hours	16 hours	15 hours

-  Core courses with C or better requirement
-  Core courses with C or better advancement exam requirement

This summary is intended to assist students and advisors in scheduling classes. The Missouri S&T CpE Undergraduate Handbook provide a complete description of course and graduation requirements for CpE, and Dual CpE-CS BS degree programs (<https://ece.mst.edu/undergraduateprograms/>).

Course Prerequisites and Elective Requirements

MATH 1215

- MATH 1214 or MATH 1210/1211

MATH 2222

- MATH 1215

MATH 3304

- MATH 2222

MATH 3108

- MATH 1215
- MATH 2222

STAT 3117 or STAT 3115 or STAT 5643

- MATH 2222

COMP SCI 1570/1580

- COMP SCI 1500 (EFFECTIVE SPRING 2020)

COMP SCI 1200

- COMP SCI 1570/1580

COMP SCI 1575/1585

- COMP SCI 1570/1580

COMP SCI 2200

- COMP SCI 1200
- COMP SCI 1575

COMP SCI 2300

- COMP SCI 1575

COMP SCI 2500

- COMP ENG 3150
- COMP SCI 1575

COMP SCI 2500

- COMP ENG 3150
- COMP SCI 1575

COMP SCI 3100

- COMP SCI 2500

COMP SCI 3500

- COMP SCI 2200

COMP SCI 4610

- COMP SCI 2500

COMP SCI 4096

- COMP SCI 3100
- ONE OF PHIL 3225, PHIL 3235, PHIL 4340, OR PHIL 4368

PHYSICS 1135

- MATH 1214 or MATH 1210/1211

PHYSICS 2135

- PHYSICS 1135
- MATH 1215

ELEC ENG 2100/2101

- MATH 1215

ELEC ENG 2120

- ELEC ENG 2100/2101
- PHYSICS 2135
- INCLUDES SOPHOMORE SEMINAR

ELEC ENG 2200/2201

- ELEC ENG 2100/2101
- PHYSICS 2135

ELEC ENG 3410

- ELEC ENG 2120

COMP ENG ELECTIVE ACDE/COMP SCI ELECTIVE

- 4000 or 5000-level Comp Sci course with at least a 3-hour lecture component.

ENG SCI ELECTIVE

- Take one of: MECH ENG 2340, MECH ENG 2519, MECH ENG 2527, PHYSICS 2311, PHYSICS 2401, CHEM 2210, BIO SCI 2213, BIO SCI 2223, CIV ENG 2200, MECH ENG 2350, PHYSICS 2305, PHYSICS 4311, CER ENG 4240, or NUC ENG 3205.

COMMUNICATION (COMM) ELECTIVE (ENGLISH 3560 OR ENGLISH 1160)

- ENGLISH 1120

PRO DEV ELECTIVE

- Take one of the following courses: BUS 5980, ECON 4430, ECON 5337, ENG MGT 2310, ENG

MGT 3320, ENG MGT 4110, ENG MGT 5514, PHIL 3225

COMP ENG 3150/3151

- COMP ENG 2210/2211
- COMP SCI 1570/1580

COMP ENG 3110

- COMP ENG 3150-CO-REQUISITE

COMP ENG 5410

- COMP ENG 3150
- STAT 3117 or STAT 3115 or STAT 5643

COMP ENG ELECTIVE B

- 4000 or 5000 level COMP ENG course with at least a 3-hour lecture component, excluding COMP ENG 4096 and COMP ENG 4097. Students admitted to the accelerated BS/MS program must satisfy Cp Eng Electives B and C with 5xxx or 6xxx-level courses and a minimum grade of B.

COMP ENG SR PROJ I 4096

- COMP ENG 2210
- EITHER ECON 1100 OR ECON 1200
- EITHER ENGLISH 3560 OR ENGLISH 1160
- COMP ENG 3150/3151
- COMP ENG 3110
- ELEC ENG 2200

COMP ENG SR PROJ II 4097

- COMP ENG 4096
- STAT 3117 or STAT 3115 or STAT 5643
- SPEECH 1185

COMP ENG 5410 – SUBSTITUTING FOR COMP SCI 3610