COLORADO MESA
U N I V E R S I T Y

CU
UNIVERSITY of COLORADO
Boulder

Name: _____   **Student ID:** _____

This is only a worksheet to track your progress in the CMU-CU Boulder Mechanical Engineering Partnership Program. An official review of your coursework will be performed by CU administration to ensure completion of all graduation requirements. The BSECE degree is conferred by CU Boulder.

- **To take Math, Science or Engineering courses, each listed prerequisite (or an equivalent course) must be completed with a grade of "C–" or better**
- **Students must take ENGL 111 and 112 unless they meet or exceed one of the following criteria:**
  ACT ENGL 27 or SATRW 630 or AP English (Lit & Comp or Lang & Comp) 4 or IB English 4

Minimum credits to graduate: 128 semester hours

REQUIRED COURSES:

Course No	Title	hr	Grade	Term
Mathematics and Computer Science: 23 semester hours				
MATH 135	Engineering Calculus I	4	_____	_____
MATH 136	Engineering Calculus II	4	_____	_____
MATH 253	Calculus III	4	_____	_____
MATH 236	Differential Equations & Linear Algebra	4	_____	_____
MATH 369	Discrete Structures I	3	_____	_____
CSCI 130	Intro to Engr Computing	4	_____	_____

Physical Science: 10 semester hours				
PHYS 131	Fundamental Mechanics	4	_____	_____
PHYS 131L	Fundamental Mechanics Laboratory	1	_____	_____
PHYS 132	Electromagnetism & Optics	4	_____	_____
PHYS 132L	Electromagnetism & Optics Laboratory	1	_____	_____

Science Elective: 3 semester hours. Must be selected from: PHYS 230, PHYS 231, BIOL 209 & 209L or CHEM 311

_____ ____ _____ 3 _____ _____

Basic Engineering: 13 semester hours				
ENGR 101	Introduction to Engineering	1	_____	_____
EECE 225	Intro to Circuits & Elect.	3	_____	_____
EECE 226	Circuits as Systems	3	_____	_____
EECE 227	Electronics Design Lab	3	_____	_____
EECE 235	Digital Logic	3	_____	_____

Freshman Elective: 3 semester hours. Options are: ENGR 140 1st Year Engr Projects or EECE XXX Intro to Digital/Analog Electronics

_____ ____ _____ 3 _____ _____

Sophomore Elective: 3 semester hours. Must be selected from: Renewable Energy, Application of Embedded Systems, or Electronics for Wireless Communication

_____ ____ _____ 3 _____ _____

Course No	Title	hr	Grade	Term
CU Electrical Engineering Courses: 38 semester hours				
CSCI 2270	Data Structures	4	_____	_____
ECEN 2310	Prog with Math Software	1	_____	_____
ECEN 2360	Programming of Digital Sys	3	_____	_____
ECEN 2370	Embedded Software Engr	3	_____	_____
ECEN 3250	Microelectronics	3	_____	_____
ECEN 3300	Linear Systems	3	_____	_____
ECEN 3593	Computer Organization	3	_____	_____
ECEN 3753	Real-Time Operating Sys	3	_____	_____
ECEN 3810	Intro to Probability Theory	3	_____	_____
ECEN 4138	Control Sys Analysis	3	_____	_____
ECEN 4610	Capstone Lab (Part 1)	3	_____	_____
ECEN 4620	Capstone Lab (Part 2)	3	_____	_____
ECEN 4638	Control Sys Lab	3	_____	_____

ELECTIVE COURSES:

Software Elective: 3 semester hours
ECEN ____ _____ ____ _____ _____
ECEN Technical Electives: 6 semester hours
ECEN ____ _____ ____ _____ _____
ECEN ____ _____ ____ _____ _____

Free Electives: 8 semester hours

_____ ____ _____ ____ _____ _____

Humanities and Social Sciences: 18 semester hours (6 hours must be upper division). Check website for complete list of courses. Link given at end of worksheet.
9 semester hours Lower Division Humanities & Social Science

SOCI 120	Technology & Society	3	_____	_____
_____ ____	_____	____	_____	_____
_____ ____	_____	____	_____	_____

6 semester hours Upper Division Humanities & Social Science
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

ENGL 325	Writing for Engineers	3	_____	_____

COLORADO MESA
U N I V E R S I T Y

University of Colorado Boulder

RECOMMENDED SEQUENCE OF COURSEWORK:

(Courses may have prerequisites or may only be offered during the fall or spring semesters)

Freshman Year

FALL SEMESTER			SPRING SEMESTER		
MATH 135	Engineering Calculus I	4	MATH 136	Engineering Calculus II	4
PHYS 131	Fundamental Mechanics	4	PHYS 132	Electromagnetism & Optics	4
PHYS 131L	Fundamental Mechanics Lab	1	PHYS 132L	Electromagnetism & Optics Lab	1
ENGR 101	Introduction to Engineering	1	CSCI 130	Intro to Engineering Computing	4
	Freshman Elective*	3		H&SS Elective (Lower-Division)	3
	H&SS Elective (Lower-Division)	3			
	TOTAL Semester hours	16		TOTAL Semester hours	16

Sophomore Year

FALL SEMESTER			SPRING SEMESTER		
MATH 236	Diff Equations & Linear Algebra	4	MATH 253	Engineering Calculus III	4
MATH 369	Discrete Structures	3	EECE 226	Circuits as Systems	3
EECE 225	Intro to Circuits & Electronics	3	EECE 227	Electronics Design Lab	3
SOCI 120	Technology & Society	3	EECE 235	Digital Logic	3
	Sophomore Elective**	3		Science Elective***	3
	TOTAL Semester hours	16		TOTAL Semester hours	16

Junior Year

FALL SEMESTER			SPRING SEMESTER		
CSCI 2270	Data Structures	4	ECEN 3300	Linear Systems	3
ECEN 2310	Programming with Math Software	1	ECEN 3593	Computer Organization	3
ECEN 2360	Programming of Digital Systems	3	ECEN 3753	Real-Time Operating Systems	3
ECEN 2370	Embedded Software Engineering	3	ECEN 3810	Introduction to Probability Theory	3
ECEN 3250	Microelectronics	3	ENGL 325	Writing for Engineers	3
	Free Electives	3		Free Electives	2
	TOTAL Semester hours	17		TOTAL Semester hours	17

Senior Year

FALL SEMESTER			SPRING SEMESTER		
ECEN 4610	Capstone Laboratory Part 1	3	ECEN 4620	Capstone Laboratory Part 2	3
ECEN 4138	Control Systems Analysis	3	ECEN 4638	Control Systems Laboratory	3
	ECEN Technical Electives	3		ECEN Software Elective	3
	ECEN Technical Electives	3		H&SS Elective (Upper-Division)	3
	H&SS Elective (Upper-Division)	3		Free Electives	3
	TOTAL Semester hours	15		TOTAL Semester hours	15

Black = CMU courses, blue = CU courses (students must have a minimum of 45 CU credits by graduation)

* Courses that fulfill the 3-credits of Freshman Elective are: ENGR 140 1st Year Engr Projects, EECE 1XX Intro to Digital/Analog Electronics

** Courses that fulfill the 3-credits of Sophomore Elective are: Choose 1 from Renewable Energy, Application of Embedded Systems or Electronics for Wireless Systems

*** Courses that fulfill the 3-credits of Science Elective are: PHYS 230, PHYS 231, BIOL 209 & 209L, CHEM 131, CHEM 151, CHEM 311, ENGR 312, or MCEN 3012

Acceptable Course Substitutions
MATH 151 (5) for MATH 135 (4)
MATH 152 (5) for MATH 136 (4)

AP Credit
An AP score of 5 is required on Physics C: Mechanics to receive credit for PHYS 131 & 131L. This is a higher score than CMU requires.

Humanities & Social Science Electives
See: http://www.coloradomesa.edu/engineering/documents/HSSAcceptableClasses-April2019Update.pdf

ECEN Technical Electives 6-credits (must be 3000- or 4000-level ECEN classes):
Course availability varies year to year. Courses highlighted in yellow are not currently offered through the CU Boulder/CMU Partnership and may be taken on the Boulder campus.

ECEN Software Elective 3-credits (must be a CU Boulder class):
ECEN 4313 Concurrent Programming; ECEN 4322 Data and Network Science, CSCI 3002 User Centered Development & Design; CSCI 3104 Algorithms; CSCI 3287 Design & Analysis of Data Systems; CSCI 3308 Software Dev Methods & Tools; CSCI 3753 Design & Analysis of Operating Systems; CSCI 4446 Chaotic Dynamics; Other upper division software courses allowed by petition.

Grade Requirements
The minimum passing grade for prerequisite and co-requisite classes in the BSECE curriculum is a C–. This includes courses completed outside the department (MATH, PHYS, etc.). The minimum passing grade for standalone classes is a D–. In addition, students need to have a cumulative and major GPA of at least 2.25 to graduate from the CU Boulder College of Engineering.

Free Electives
College-level coursework accepted by CU Boulder not used otherwise to satisfy BSECE degree requirements. Use Transferology.com to verify that courses will transfer to CU Boulder.

Course Work Not Accepted for Transfer Credit
The following course work will not be accepted for transfer credit and will not count toward a degree at Boulder:
- courses completed more than 10 years prior to transfer
- any courses in which the grade earned is below a C- (1.70)
- courses identified by CU Boulder as remedial, such as remedial English, mathematics, science and developmental reading
- vocational-technical courses that are offered at two-year and proprietary institutions (exceptions may be granted only by the CU Boulder dean responsible for the student's curriculum—when exceptions appear to be warranted, appropriate department heads make recommendations to their respective deans regarding credit for such courses)
- courses in religion that constitute specialized religious training or that are doctrinal in nature
- credits earned for work experience or through a cooperative education program
- outdoor leadership education coursework
- credits earned in physical education activity courses
- courses or programs identified as college orientation