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ENGT M38	Capstone Project in Mechatronics Engineering Technology	2 units
PSY M125	Statistics for the Behavioral and Social Sciences	3 units
SOC M125	Statistics for the Behavioral and Social Sciences	3 units

REVISIONS

EMT M04 Emergency Medical Technician-Refresher 2– 0.5 units

TOP and SAM CODE CHANGES

COUN M20 Self-Paced Career Assessment 0.5 unit **E - Non-Occupational**D - Possibly Occupational

ENSC M07 Applied Solar Technology 3 units 0303.00 - *Environmental Technology

0399.00 - Environmental Sciences and

Technologies, Other

SOC M80 Internship in Sociology 1 – 4 units 4932.00 - *General Work Experience3

2208.00 Sociology

C - Clearly Occupational
B - Advanced Occupational

NEW NONCREDIT COURSES

ENSC M971 Landscape Management – Plant Selection 30 hours

NEW PROGRAMS

Mechatronics Engineering Technology Certificate of Achievement 26-29 units

Footnote: 3 - Occupational Work Experience, as defined by Title 5, Section 55252 and that are included in an occupational program, should be reported in the T.O.P. code that designates the occupation in which the experience takes place.

NEW COURSES

ENGT M38 Capstone Project in Mechatronics Engineering Technology 2 units

Prerequisites: ENGT M02; ENGT M04; ENGT M06; ENGT M30; ENGT M32

Hours: 6 laboratory weekly

Provides engineering design experience by integrating the knowledge gained in previous coursework related to mechatronics engineering technology. Incorporates the engineering design process, problem solving and troubleshooting, teamwork, project management, technical writing, and project presentation skills.

Applies to Associate Degree. Transfer Credit: CSU

Notes:

This course is the last course in the sequence of courses for the Certificate of Achievement degree in Mechatronics Engineering Technology. The creation of this technology certificate which includes experiential studies in electromechanics (circuits, electronics, sensors, microcontrollers, programmable logic controllers, robotics, etc.) was recommended for two years in a row (Spring 2018 and Spring 2019) by two advisory committees. Furthermore, the largest employer in Ventura County, the Navy base in Point Mugu and Port Hueneme, strongly emphasized the need for such a program of study in the area as they are constantly seeking to hire well trained and qualified technicians.

PSY M125 Statistics for the Behavioral and Social Sciences 3 units

Prerequisites: MATH M03 or placement as determined by the college's multiple measures assessment process.

Hours: 3 lecture hours

Applies statistical methods to behavioral and social science data. Includes descriptive and inferential statistics, levels and types of measurement, measures of central tendency and dispersion, normal t and chi-square distributions, probability and hypothesis testing, and correlation and regression. Applies statistical software to behavioral and social science data. (Same as SOC M125.)

Course Credit Limitations: credit will only be awarded for MATH M15 or M15H or PSY M125 or SOC M125. Applies to Associate Degree. Transfer Credit: CSU

Notes:

- 1. the course will be proposed for UC transfer in June 2022, and CSU GE/IGETC in Dec, 2022 to be effective Fall 2023.
- 2. Statistics for the Behavioral and Social Sciences is necessary for as it exists as a C-ID Course that appears on multiple TMCs including Psychology, and Sociology. This course is taught at our sister colleges in the District, and at the majority of Community Colleges throughout California. Our students will benefit greatly by being taught Introductory Statistics from an expert in Social or Behavioral Science. The Psychology TMC states that the preferred preparation in statistics for transfer students is Statistics for the Behavioral and Social Sciences.

NEW COURSES

SOC M125 Statistics for the Behavioral and Social Sciences 3 units

Prerequisites: MATH M03 or placement as determined by the college's multiple measures assessment process.

Hours: 3 lecture hours

Applies statistical methods to behavioral and social science data. Includes descriptive and inferential statistics, levels and types of measurement, measures of central tendency and dispersion, normal t and chi-square distributions, probability and hypothesis testing, and correlation and regression. Applies statistical software to behavioral and social science data. (Same as PSY M125.)

Course Credit Limitations: credit will only be awarded for MATH M15 or M15H or PSY M125 or SOC M125. Applies to Associate Degree. Transfer Credit: CSU

Notes:

- 1. The course will be proposed for UC transfer in June 2022, and CSU GE/IGETC in Dec, 2022 to be effective Fall 2023.
- 2. Statistics for the Behavioral and Social Sciences is necessary for as it exists as a C-ID Course that appears on multiple TMCs including Psychology, and Sociology. This course is taught at our sister colleges in the District, and at the majority of Community Colleges throughout California. Our students will benefit greatly by being taught Introductory Statistics from an expert in Social or Behavioral Science. The Psychology TMC states that the preferred preparation in statistics for transfer students is Statistics for the Behavioral and Social Sciences.

REVISIONS

EMT M04 Emergency Medical Technician-Refresher 2- 0.5 units

Prerequisites: None

Hours: 2 lecture hours 1.5 lab

Updates the skills and knowledge of the emergency medical technician to meet State/National Registry of Emergency Medical Technicians (NREMT) requirements for recertification. Reviews life support assessment, emergency interventions and the use of emergency equipment and supplies. (Formerly EMT M02.)

Course Credit Limitation: Can be used only once toward AA/AS Degree.

Students may repeat this course if legally mandated. Applies to Associate Degree. Transfer Credit: CSU

Notes: Change from lecture to lab-based and reduce the number of units to align with the requirements set by Ventura County Emergency Medical Services Agency.

TOP and SAM CODE CHANGES

COUN M20 Self-Paced Career Assessment 0.5 unit

Prerequisites: None

Hours: 0.5 lecture hour

Introduces online self-assessment tools to identify and prioritize values, interests, skills, and personality attributes in a self-paced format culminating in options for college majors and/or future careers. Includes assignments and activities to help narrow down career options to a manageable size and to strategize next steps congruent with individual goals and objectives. (Formerly COUN M60C.)

Applies to Associate Degree. Transfer Credit: CSU

SAM Code change: E - Non-Occupational D - Possibly Occupational

Notes: SAM Code change.

ENSC M07 Applied Solar Technology 3 units

Prerequisites: None

Hours: 3 lecture hours

Surveys the fundamentals of solar technology and photovoltaic systems with a focus on design, installation, and maintenance. Emphasizes mechanical and electrical integration, system sizing, array layout, mounting, related electric codes, workplace safety standards, and troubleshooting.

Applies to Associate Degree. Transfer Credit: CSU

TOP Code change: 0303.00 - *Environmental Technology 0399.00 - Environmental Sciences and

Technologies, Other

Notes: TOP Code change.

SOC M80 Internship in Sociology 1 – 4 units

Prerequisites: Completion of or concurrent enrollment in one course in the discpline and instructor approval

Hours: Hours as arranged

Provides on-the-job learning to develop effective work habits, attitudes, and career awareness in paid or unpaid internships that are related to the discipline. Involves the development and documentation of learning objectives and the completion of an internship paper, presentation, or project. Includes both workplace supervisor and faculty adviser feedback and/or written evaluations.

Course Credit Limitation: To take this course, contact the Career Transfer Center. Requires orientation session. Students receive one unit of credit for each 60 hours unpaid or 75 hours paid work. May enroll in up to 4 units a semester with a maximum of 16 total units of any type of work experience. Applies to Associate Degree.

Applies to Associate Degree. Transfer Credit: CSU

TOP Code change: **4932.00 - *General Work Experience3** 2208.00 Sociology SAM Code change: **C - Clearly Occupational** B - Advanced Occupational

Notes: TOP and SAM Code change.

NEW NONCREDIT COURSES

ENSC M971 Landscape Management - Plant Selection 30 hours

Prerequisite: None Hours: 30

Examines plant characteristics as identification features. Emphasizes landscape plant functional characteristics applicable to California landscapes, e.g. drought tolerance, fire resistance, erosion control. Examines plant cultural requirements in relation to landscape site conditions. Provides a baseline for developing landscape plant palettes based upon aesthetic features, functionality and site conditions.

Does NOT apply to Associate Degree.

Notes:

This course is an integral component of a new proposed Landscape Management Certificate of Completion Program. It will provide students with plant knowledge related to the functional applications, e.g., fire resistance, drought tolerance, erosion control and adaptation selection criteria for California environments. The course will utilize a free plant identification software program which will be supplemented with recorded lectures and internet resources.

The Mechatronics Engineering Technology Certificate of Achievement

The Certificate of Achievement in Mechatronics Engineering Technology prepares students to work in an engineering industry to design, create, build, troubleshoot, repair, maintain, and enhance any electromechanical systems which use automation including robotics. Students completing this program will be well versed in the principles of operation of integrated electronic, electrical, and mechanical components and systems through the use of computer controls. This mastery will be accomplished by engaging the students in contextualized and experiential learning where the foundational principles in mechatronics engineering will be linked to concrete, real-world applications through practicums and industry internships. To earn a Certificate of Achievement in Mechatronics Engineering Technology students must complete 26-29 specified units and will be encouraged to participate in a one semester paid or unpaid internship with a Moorpark College affiliated industry.

	ficate of Achievement in Electronics Engineering Technology, complete 26-29 specified units.	Units
ENGR M04	Engineering Design/CAD	3
ENGT M02	Digital Circuits	3
ENGT M04	Basic Electronics	3
ENGT M06	Introduction to Microprocessors and Microcontrollers	3
ENGT M30	Programmable Logic Controllers	3
ENGT M32	Electrical and Mechanical Devices	3
ENGT M38	Capstone Project in Mechatronics Engineering Technology	2
Select and com	nplete one of the following math courses (3 to 6 units):	
MATH M06	Trigonometry	3
Or		
MATH M07	Precalculus and Trigonometry	6
Electives: Sele	ct and complete 3 units from the following courses	
ENGT M10	Introduction to Unmanned Aerial Vehicle Technology	3
Or		
ENGT M12	Radar Fundamentals	3
Total Units		26-29