SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

UNIVERSITY:	**SDSU**
CURRENT PROGRAM TITLE:	**Electronics Engineering Technology (B.S.)**
CIP CODE:	**15.0303**
UNIVERSITY DEPARTMENT:	**Construction & Operations Management**
BANNER DEPARTMENT CODE:	**SCOM**
UNIVERSITY DIVISION:	**Jerome J. Lohr College of Engineering**
BANNER DIVISION CODE:	**3E**

University Approval
To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Dennis D. Hedge — Vice President of Academic Affairs or President of the University

3/16/2020 — Date

1. This modification addresses a change in:

☒ Total credits required within the discipline
☐ Total credits of elective course work
☐ Program name
☐ CIP Code
☒ Total credits of supportive course work
☐ Total credits required for program
☐ Existing specialization
☐ Other (explain below)

2. Effective date of change: 2020-2021 Academic Year

3. Program Degree Level: Associate ☐ Bachelor's ☒ Master's ☐ Doctoral ☐

4. Category: Certificate ☐ Specialization ☐ Minor ☐ Major ☒

5. If a name change is proposed, the change will occur:

☐ On the effective date for all students

☐ On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name:

6. Primary Aspects of the Modification:

Existing Curriculum				*Proposed Curriculum (highlight changes)*			
Pref.	**Num.**	**Title**	**Cr. Hrs.**	**Pref.**	**Num.**	**Title**	**Cr. Hrs.**
System General Education Requirements			**32**	**System General Education Requirements**			**32**
SGR 1 Written Communication ENGL 101 Composition I (3) ENGL 277 Technical Writing in Engineering (3)			6	SGR 1 Written Communication ENGL 101 Composition I (3) ENGL 277 Technical Writing in Engineering (3)			6
SGR 2 Oral Communication SPCM 101 Fundamentals of Speech			3	SGR 2 Oral Communication SPCM 101 Fundamentals of Speech			3
SGR 3 Social Sciences/Diversity ECON 201 Principles of Microeconomics (3) Student Choice (3)			6	SGR 3 Social Sciences/Diversity ECON 201 Principles of Microeconomics (3) Student Choice (3)			6
SGR 4 Arts and Humanities/Diversity			6	SGR 4 Arts and Humanities/Diversity			6

Existing Curriculum				*Proposed Curriculum (highlight changes)*			
Pref.	**Num.**	**Title**	**Cr. Hrs.**	**Pref.**	**Num.**	**Title**	**Cr. Hrs.**
SGR 5 Mathematics MATH 114 College Algebra			3	SGR 5 Mathematics MATH 114 College Algebra			3
SGR 6 Natural Sciences PHYS 111-111L Intro to Physics I & Lab (4) and CHEM 106-106L Chemistry Survey & Lab (4)			8	SGR 6 Natural Sciences PHYS 111-111L Intro to Physics I & Lab (4) and CHEM 106-106L Chemistry Survey & Lab (4)			8
Major Requirements			**37**	**Major Requirements**			**39**
ET	210-210L	Introduction to Electronic Systems	4	ET	210-210L	Introduction to Electronic Systems	4
ET	220-220L	Analog Electronics & Lab	4	ET	220-220L	Analog Electronics & Lab	4
ET	232-232L	Digital Electronics and Microprocessors & Lab	3	ET	232-232L	Digital Electronics and Microprocessors & Lab	3
ET	240	Techniques of Servicing	2	ET	240	Techniques of Servicing	3
ET	325-325L	Advanced Analog Electronics & Lab	4	ET	325-325L	Advanced Analog Electronics & Lab	4
ET	330-330L	Microcontrollers and Networks & Lab	3	ET	330-330L	Microcontrollers and Networks & Lab	3
ET	332-332L	Advanced Digital Electronics & Lab	3	ET	332-332L	Advanced Digital Electronics & Lab	3
ET	345-345L	Power Systems & Lab	3	ET	345-345L	Power Systems & Lab	3
ET	380-380L	Circuit Boards and Design & Lab	3	ET	380-380L	Circuit Boards and Design & Lab	3
ET	426-426L	Communication Systems & Lab	3	ET	426-426L	Communication Systems & Lab	3
ET	451-451L	Industrial Controls and PLCs & Lab	3	ET	451-451L	Industrial Controls and PLCs & Lab	3
ET	471	Capstone Experience	2	ET	471	Capstone Experience	2
				ET	490	Seminar	1
Supporting Coursework			**51**	**Supporting Coursework**			**49**
ACCT	210	Principles of Accounting I	3	ACCT	210	Principles of Accounting I	3
ACCT	211	Principles of Accounting II	3	~~ACCT~~	~~211~~	~~Principles of Accounting II~~	~~3~~
BADM	360	Organization and Management	3	BADM OR GE	360 385	Organization and Management Intro. to Engineering Systems Management	3
				CM	130	Management Tools & Analysis	3
				CSC	150	Computer Science I	3
CSC	325	Management Information Systems	3	~~CSC~~	~~325~~	~~Management Information Systems~~	~~3~~
FIN	310	Business Finance	3	~~FIN~~	~~310~~	~~Business Finance~~	~~3~~
GE	101	Introduction to Engineering & Technical Professions	1	GE	101	Introduction to Engineering & Technical Professions	1
GE	121	Engineering Design Graphics I	1	GE	121	Engineering Design Graphics I	1
GE	123	Computer Aided Drawing	1	GE	123	Computer Aided Drawing	1
GE	231	Technology Society & Ethics	3	GE	231	Technology Society & Ethics	3
HRM LEAD	460 435	Human Resource Management or Organizational Leadership & Team Development	3	HRM LDR	460 435	Human Resource Management or Organizational Leadership & Team Development	3
MATH	121-121L	Survey of Calculus & Lab	5	MATH	121-121L	Survey of Calculus & Lab	5
MNET	367-367L	Production Strategy & Lab	3	MNET	367-367L	Production Strategy & Lab	3
OM	462	Quality Management	3	OM	462	Quality Management	3
OM	470	Project Management	2	OM	470	Project Management	2

Existing Curriculum				*Proposed Curriculum (highlight changes)*			
Pref.	**Num.**	**Title**	**Cr. Hrs.**	**Pref.**	**Num.**	**Title**	**Cr. Hrs.**
STAT	281	Introduction to Statistics	3	STAT	281	Introduction to Statistics	3
		Technical Electives	11			Technical Electives	12
Electives			**0**	**Electives**			**0**
Summary of Credits Electronics Engineering Technology (B.S.)							
System General Education Requirements			**32**	**System General Education Requirements**			**32**
Major Requirements			**37**	**Major Requirements**			**39**
Supporting Coursework			**51**	**Supporting Coursework**			**49**
Electives			**0**	**Electives**			**0**
Total number of hours required for major			88	Total number of hours required for major			88
Total number of hours required for degree			120	Total number of hours required for degree			120

7. Explanation of the Change:

The Department of Construction and Operations Management has identified the following changes to the Electronics Engineering Technology major:

- Added ET 490 Seminar as a requirement. Per the program's assessment plan, the Department intends to use the seminar to measure end-of-program mastery in effective processes, ability to solve engineering technology problems, and apply project management techniques.
- Electronics Engineering Technology (EET) students will have the option to pursue the Management minor or the Engineering Management minor. This is part of the Department's recruitment/retention strategy to provide more choices and be less prescriptive.
- EET students have expressed a keen interest in added technical coursework in lieu of business management topics, so ACCT 211 and FIN 310 were removed as requirements.
- Requiring CSC 150 Computer Science I, a computer programming course, instead of CSC 325 Management Information Systems will help students in higher level technical courses in the EET program.