

ELECTRONICS TECHNOLOGY (BIOMEDICAL ELECTRONICS) - ASSOCIATE OF APPLIED SCIENCE

Doña Ana Community College 2022-2023 Catalog (68 credits)

NOTE: Students must earn a final grade of C- or better in all required ELT courses and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 68 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
<i>Select one course from four of the following six content areas for a total of 12-14 credits^{1,2}</i>		12-14
This degree requires courses from Areas I, IV, V, and VI; students do not need to take additional courses to complete the General Education requirements.		
Area I: Communications		
ENGL 1110G	Composition I	
Area IV: Social/Behavioral Sciences		
Select one from the following: ³		
PSYC 1110G	Introduction to Psychology	
SOCI 1110G	Introduction to Sociology	
Area V: Humanities		
Select one from the following:		
ENGL 1410G	Introduction to Literature	
ENGL 2310G	Introduction to Creative Writing	
ENGL 2520G	Film as Literature	
ENGL 2650G	World Literature I	
HIST 1110G	United States History I	
HIST 1120G	United States History II	
HIST 1130G	World History I	
HIST 1140G	World History II	
HIST 1150G	Western Civilization I	
HIST 1160G	Western Civilization II	
HIST 2245G	Islamic Civilizations to 1800	
HIST 2246G	Islamic Civilizations since 1800	
HIST 2250G	East Asia to 1600	
HIST 2251G	East Asia since 1600	
PHIL 1115G	Introduction to Philosophy	
PHIL 1120G	Logic, Reasoning, & Critical Thinking	
PHIL 1140G	Quest for God	
PHIL 1145G	Philosophy, Law, and Ethics	
PHIL 2110G	Introduction to Ethics	

PHIL 2230G	Philosophical Thought	
Or any other approved New Mexico General Education Requirements Area V courses listed in the current NMSU Catalog.		
Area VI: Creative and Fine Arts		
Select one from the following:		
ARTH 1115G	Orientation in Art	
ARTS 1145G	Visual Concepts	
ARTH 2110G	History of Art I	
ARTH 2120G	History of Art II	
DANC 1110G	Dance Appreciation	
MUSC 1110G	Music Appreciation: Jazz	
MUSC 1130G	Music Appreciation: Western Music	
THEA 1110G	Introduction to Theatre	
Or any other approved New Mexico General Education Requirements Area VI courses listed in the current NMSU Catalog.		
<i>General Education Elective</i>		
Select one from the following:		3
ENGL 2210G	Professional & Technical Communication	
COMM 1115G	Introduction to Communication	
COMM 1130G	Public Speaking	
Core Requirements		
Select one from the following:		4
MATH 1250G	Trigonometry & Pre-Calculus ⁴	
ELT 120	Mathematics for Electronics ⁵	
Major Requirements		
<i>Technical Requirements⁶</i>		
ELT 110	Electronics I	4
ELT 135	Electronics II	4
ELT 155	Electronics CAD and PCB Design	3
ELT 160	Digital Electronics I	4
ELT 175	Soldering Practices	3
ELT 205	Semiconductor Devices	4
ELT 225	Computer Applications for Technicians	3
ELT 240	Introduction to Photonics	4
ELT 260	Instrumentation Control and Signal Conditioning	4
Choose one from the following:		1
ELT 265	Special Topics	
OECS 101	Computer Basics	
OETS 102	Career Readiness Certification Preparation	
Concentration Coursework		
AHS 120	Medical Terminology	3
AHS 202	Legal and Ethical Issues in Health Care	3
BIOL 1130G	Introductory Anatomy & Physiology (non-majors)	4
ELT 270	Biomedical Equipment Instrumentation	4
Total Credits		68

1

Each course selected must be from a different area and students cannot take multiple courses in the same area.

2

See the General Education (<http://catalogs.nmsu.edu/dona-ana/general-education-and-transfer-options/transfer-new-mexico-institutions/>) section of the catalog for a full list of courses.

3

BMGT 240 Human Relations is also an available course but it will not automatically count towards General Education and will need an exception if it is selected.

4

Recommended for transfer track.

5

Recommended for career track.

6

A final grade of C- or better is required in all 100-level ELT courses to progress to 200-level ELT courses.

(68 credits)

A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

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Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 68 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Semester 1	Credits
FALL	
Choose one from the following:	4
MATH 1250G Trigonometry & Pre-Calculus ²	
ELT 120 Mathematics for Electronics ^{1,2}	
ELT 110 Electronics I	4
ELT 155 Electronics CAD and PCB Design	3
ELT 175 Soldering Practices	3
ELT 225 Computer Applications for Technicians	3
Credits	17
Semester 2	
SPRING	
Area I: Communications - English Composition Level 1	4
ENGL 1110G Composition I	
Area VI: Creative and Fine Arts - Choose one from the following (or any other approved Area VI course in the NMSU/DACC Catalog):	3
ARTH 1115G Orientation in Art	
ARTH 2110G History of Art I	
ARTH 2120G History of Art II	
ARTS 1145G Visual Concepts	
DANC 1110G Dance Appreciation	
MUSC 1110G Music Appreciation: Jazz	
MUSC 1130G Music Appreciation: Western Music	
ELT 135 Electronics II	4
ELT 160 Digital Electronics I	4
Choose one from the following:	1

ELT 265	Special Topics	
OECS 101	Computer Basics	
OETS 102	Career Readiness Certification Preparation	
Credits		16
Semester 3		
SUMMER		
Area V: Humanities - Choose one from the following (or any other approved Area V course in the NMSU/DACC Catalog):		3
ENGL 1410G	Introduction to Literature	
ENGL 2310G	Introduction to Creative Writing	
ENGL 2520G	Film as Literature	
ENGL 2650G	World Literature I	
HIST 1110G	United States History I	
HIST 1120G	United States History II	
HIST 1130G	World History I	
HIST 1140G	World History II	
HIST 1150G	Western Civilization I	
HIST 1160G	Western Civilization II	
HIST 2245G	Islamic Civilizations to 1800	
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PHIL 1115G	Introduction to Philosophy	
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PHIL 1140G	Quest for God	
PHIL 1145G	Philosophy, Law, and Ethics	
PHIL 2110G	Introduction to Ethics	
PHIL 2230G	Philosophical Thought	
Credits		3
Semester 4		
FALL		
General Education Elective - Area I: Communications - Choose one from the following:		3
ENGL 2210G	Professional & Technical Communication	
COMM 1115G	Introduction to Communication	
COMM 1130G	Public Speaking	
AHS 120	Medical Terminology	3
AHS 202	Legal and Ethical Issues in Health Care	3
BIOL 1130G	Introductory Anatomy & Physiology (non-majors)	4
ELT 205	Semiconductor Devices	4
Credits		17
Semester 5		
SPRING		
Area IV: Social/Behavioral Sciences - Choose one from the following:		3
PSYC 1110G	Introduction to Psychology	
SOCI 1110G	Introduction to Sociology	
ELT 240	Introduction to Photonics	4
ELT 260	Instrumentation Control and Signal Conditioning	4
ELT 270	Biomedical Equipment Instrumentation	4
Credits		15
Total Credits		68

1

While ELT 120 meets program requirements, it does not meet the NM General Education Area II: Mathematics requirements.

2

MATH 1250G is recommended for students pursuing Transfer Track.
ELT 120 is recommended for students pursuing Career Track.