

BACHELOR DEGREE PATHWAY

Associate of Applied Science (AAS) to Bachelor of Applied Arts & Sciences (BAAS)

Catalog Year: 2024-2025 (This pathway may be used if you entered OC on or before this academic year.)

BACHELOR DEGREE PATHWAY FOR FULL-TIME STUDENTS

This semester-by-semester Bachelor Degree Pathway outlines the specific courses that lead to an associate's and a bachelor's degree for a full-time student. Modifications can be considered to fit the needs of part-time students or students without completed pre-requisites for certain courses. This is not an official degree plan. Please refer to the catalog for official degree requirements. For questions about the associate's degree portion of this pathway, contact the OC Pathways Advising Center at (432) 335-6433 or advising@odessa.edu. For questions about the bachelor's degree portion of this transfer pathway, contact baas@odessa.edu.

AAS in Automation (Instrumentation & Electrical) 60 Semester Credit Hours (SCH)

YEAR 1 - SEMESTER 1 - 17 SCH

PSYC 1300 Learning Frameworks (3 SCH)
CETT 1509 DC-AC Circuits (5 SCH)
RBTC 1343 Robotics (3 SCH)
EEIR 1309 National Electrical Code (3 SCH)
ELPT 1355 Electronic Applications (3 SCH)

YEAR 1 - SEMESTER 2 - 15 SCH

PTAC 1332 Process Instrumentation I (3 SCH)
IEIR 1310 Motor Controls (3 SCH)
ELMT 2333 Industrial Electronics (3 SCH)
ELPT 2319 Programmable Logic Controllers I (3 SCH)
PTAC 2336 Process Instrumentation II (3 SCH)

YEAR 2 - SEMESTER 3 - 13 SCH

INMT 1417 Industrial Automation (4 SCH)
INTC 1356 Instrumentation Calibration (3 SCH)
ARTS 1301 Art Appreciation (3 SCH)
ELMT 2339 Advanced Programmable Logic (3 SCH)

YEAR 2 - SEMESTER 4 - 15 SCH

CETT 2388 Internship (3 SCH)
HIST 1301 United States History I (3 SCH)
ENGL 2311 Technical & Business Writing (3 SCH)
BCIS 1305 Business Computer Applications (3 SCH)
MATH 1314 College Algebra (3 SCH)

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YEAR 3 - SEMESTER 5 - 14 SCH

HIST 1301 United States History I (3 SCH)
MATH 2413 Calculus I (4 SCH)
HIST 1302 United States History II (3 SCH)
PHYS 2425 University Physics I (4 SCH)

YEAR 3 - SEMESTER 6 - 13 SCH

ARET 3301 Advanced Engineering Programming (3 SCH)
CHEM 1311 General Chemistry I (3 SCH)
CHEM 1111 General Chemistry I Lab (1 SCH)
ARET 3305 Robotics in Automation (3 SCH)
GOVT 2306 Texas Government (3 SCH)

YEAR 4 - SEMESTER 7 - 6 SCH

GOVT 2305 Federal Government (3 SCH)
ENGL 1301 English Composition I (3 SCH)

YEAR 4 - SEMESTER 8 - 15 SCH

ARET 3308 Advanced Engineering Design (3 SCH)
ARET 3406 Robotics and Automated Systems (4 SCH)
ARET 3407 Electro Pneumatic & Hydraulic Control Circuits (4 SCH)
ARET 4401 Automated Systems (4 SCH)

YEAR 4 - SEMESTER 7 - 12 SCH

ARET 4303 Mechanics and Machine Elements (3 SCH)
ARET 4305 Manufacturing Processes (3 SCH)
KINE 1164 Introduction to Physical Fitness & Sport (1 SCH)
ARET 4212 Senior Project (2 SCH)
PHIL 2306 Introduction to Ethics (3 SCH)



The information on this document is based on data gathered in 2024. Visit odessa.lightcastcc.com for the latest labor market trends.

CAREER PATHWAY

Automation



WHO'S HIRING?

Midland/Odessa



Texas



POSSIBLE CAREERS INCLUDE

CNC Operator - Lathe Operator - Router Operator - Plasma Operator - Mill Operator - Electromechanical Technician
 Robotics Technician - Field Service Representative - Industrial Maintenance Technician - Numerical Control
 Programmer - Quality Engineer - Automation Technician - Instrumentation & Electrical Technician - Electrical Technician
 - CNC Programmer - Calibration Technician - Manufacturing Engineer

For more information, please contact the Keith Career & Transfer Center at 432-335-6874 or email lrc@odessa.edu. For questions about registration, please contact advising@odessa.edu.