

INSTRUMENTATION, I&E TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE (AAS)

Locations: Gonzales, Reserve, St. Charles

The Instrumentation & Electrical Technology (I&E) program prepares students for a successful career as an Instrumentation Technician. Students earn certificates and a technical diplomas with progression through the program. All courses applied to the degree must be passed with a "C" or better. Developmental courses will not be applied to the degree.

Specialized Accreditation

The Instrumentation and Electrical Technology Program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE). This prestigious accreditation affirms that the program meets rigorous academic and industry standards, ensuring students are well-prepared for successful careers in the field.

Curriculum

Course	Title	Hours
First Semester		
General Education, Mathematics/Analytics Reasoning - MATH 1203		3
CPTR 1013	Intro to Computer Technology	3
CORE 1003	Core Industry Safety	3
INST 1116	Introduction to Instrumentatio	6
Hours		15
Second Semester		
SPCH 2013	Techniques of Speech	3
General Education, Natural Science - PHSC 1023		3
INST 1215	Fund of Instrumentation I	5
INST 1225	Fund of Instrumentation II	5
Hours		16
Third Semester		
INST 2313	Intermediate Instrumentation I	3
INST 2324	Intermed Instrumentation II	4
ENGL 1013	English Composition I ¹ Fulfills General Education English requirement	3
General Education, Social Science - Select 3 hours from ECON, POLI, PSYC, or SOCL		3
ESCI 2003	Intro to Alternative Energy	3
Hours		16
Fourth Semester		
General Education, Humanities - Select three hours from HIST, PHIL (except PHIL 2113), or RELS		3
INST 2414	Advanced Instrumentation I	4
INST 2424	Advanced Instrumentation II	4
INST 2493	Industry Troubleshooting Capst	3
Hours		14
Total Hours		61

Additional Academic Awards in Instrumentation and Electrical Technology

Instrumentation Helper I, Career and Technical Certificate (CTC)

Code	Title	Hours
CORE 1003	Core Industry Safety ¹	3
INST 1116	Introduction to Instrumentatio ²	6
Total Hours		9

¹ Upon successful completion of CORE 1003, students earn the Core Curriculum Industry-based Certification (IBC) from the National Center for Construction Education and Research (NCCER).

² Upon successful completion of INST 1116, students earn the NCCER Instrumentation Level 1 IBC.

Instrumentation Helper II, Certificate of Technical Studies (CTS)

Code	Title	Hours
CPTR 1013	Intro to Computer Technology	3
or SPCH 2013 Techniques of Speech		
CORE 1003	Core Industry Safety	3
INST 1116	Introduction to Instrumentatio	6
INST 1215	Fund of Instrumentation I ¹	5
INST 1225	Fund of Instrumentation II ¹	5
Total Hours		22

¹ Upon successful completion of INST 1215 and INST 1225, students earn the NCCER Instrumentation Level 2 IBC.

Industrial Instrumentation Technology, Technical Diploma (TD)

Code	Title	Hours
CPTR 1013	Intro to Computer Technology	3
CORE 1003	Core Industry Safety	3
INST 1116	Introduction to Instrumentatio	6
INST 1215	Fund of Instrumentation I	5
INST 1225	Fund of Instrumentation II	5
INST 2313	Intermediate Instrumentation I ¹	3
INST 2324	Intermed Instrumentation II ¹	4
SPCH 2013	Techniques of Speech	3
ESCI 2003	Intro to Alternative Energy	3
INST 2414	Advanced Instrumentation I ²	4
INST 2424	Advanced Instrumentation II ²	4
INST 2493	Industry Troubleshooting Capst	3
Total Hours		46

¹ Upon successful completion of INST 2313 and INST 2324, students earn the NCCER Instrumentation Level 3 IBC.

² Upon successful completion of INST 2414 and INST 2424, students earn the NCCER Instrumentation Level 4 IBC.

Upon successful completion of the program, the graduate will be able to:

1. Demonstrate adherence to safety protocols specific to working with instrumentation and electrical systems in industry settings.
2. Demonstrate proficiency in the installation of instrumentation systems.

3. Demonstrate proficiency in the maintenance of instrumentation systems.
4. Demonstrate proficiency in control system technology.
5. Demonstrate the knowledge, skills, abilities, and dispositions expected by employers seeking entry-level instrumentation technicians.

For additional career-related information and resources, visit the RPCC Career Success webpage (<https://www.rpcc.edu/workforce-training/career-success-center/career-success-center/>).