

BACHELOR OF SCIENCE DEGREE AUTOMOTIVE TECHNOLOGY

DIVISION OF CAREER & TECHNICAL EDUCATION

Admission requirements:

Upper Division Standing

Students interested in pursuing the Bachelor of Science in Automotive Technology must meet the following requirements to be considered to have upper division standing:

- Major courses: 32-35 units of transportation related courses from a designated associate degree course sequence per California Community College Chancellor's Office Taxonomy of Programs (TOP) codes 0948.00. Each course must be completed with a C or higher.
- A minimum of 30 units (45 quarter units) in general education from either the CSU GE or IGETC patterns with a 2.0 cumulative GPA. The 30 units must include the following courses, completed with a C or higher:
 - o Written Communication
 - o Oral Communication
 - o Critical Thinking
 - o Mathematics

Students must complete the CSU GE or IGETC pattern prior to earning the bachelor's degree.

Steps for applying for upper division standing:

- Apply to Río Hondo College
- Submit a completed supplemental application
- Submit all official transcripts to Admissions and Records (must be delivered from sending institution)

Credit by Exam

The Board of Trustees of Río Hondo College, in accordance with provisions of Title 5 (55753), authorizes the college to grant appropriate semester unit credit to any student who is currently enrolled and successfully passes an examination administered by appropriate staff. Students may not be enrolled in the course for which they want to challenge and receive Credit by Examination.

The Automotive Technology Department has elected to grant course credit to enable students who can demonstrate proficiency in specific bodies of subject matter, to plan a relevant educational program that will exclude courses in which essential levels of mastery of subject matter material have been previously attained.

Students admitted to the bachelor's degree shall be given Río Hondo College course credit up to 16 units in lower division and 12 units in upper division automotive technology courses upon the successful completion of examinations (which will not count as units in residence). The student's transcript will denote credit earned by credit by examination.

To challenge a course and receive Credit by Examination a student must be registered in the college and be in good standing. Course(s) must be listed in the college catalog.

Educational Leave

Students enrolled in upper division coursework for the Bachelor of Science in Automotive Technology may request an educational leave for one or two consecutive semesters without having to reapply to the upper division program upon their return. Students will need to reapply to the college if educational leave includes one primary term (fall or spring semester).

To be eligible for an educational leave students must:

- Complete at least one upper division course with a C or higher.
- Be in good academic standing.
- Must complete and submit the appropriate form to Admissions and Records including the reason for the educational leave and the approximate date to resume the upper division course work.

Program Learning Outcomes

Graduates will be technically competent and possess strong interpersonal skills. They will have the ability to communicate effectively, be able to solve problems, work in teams, and will have developed an understanding of the need for continued professional development. The Program Learning Outcomes are grouped into five broad interrelated categories:

1. Specialized Knowledge
 - a. This category addresses what students should demonstrate with respect to the Automotive Technology Industry beyond the vocabularies, theories, and skills of the particular fields of study.
2. Broad and Integrative Knowledge
 - a. This category asks students to consolidate learning from different broad fields of study (e.g., Humanities, Arts, Applied Sciences, and Social Sciences) and to discover and explore concepts and questions that bridge these essential areas of learning.
3. Intellectual Skills
 - a. This category includes both traditional and nontraditional cognitive skills, which include analytic inquiry, use of information resources, engagement with diverse perspectives, ethical reasoning, and quantitative and communicative fluency. All of these emphasize the importance of students making, confronting, and interpreting ideas and arguments from different points of reference (e.g., cultural, technological, and political).
4. Applied and Collaborative Learning
 - a. This category emphasizes what students can do with what they know. Students will be asked to demonstrate their learning by addressing unscripted problems in scholarly inquiry, both at work and in other settings outside the classroom. It also includes research and creative activities involving both individual and group efforts, and may also include practical skills crucial to the application of expertise.
5. Civics and Global Learning
 - a. This category recognizes higher education's responsibilities both to democracy and global community. Students will demonstrate integration of their skills and knowledge by engaging with and responding to civic, social, environmental, and economic challenges at local, state, national, and international levels.

Specific Program Learning Outcome Proficiencies

The following is an overview of the five categories of learning listed above at each level of the Automotive Technology Degree Courses (Lower Division and Upper Division), and defines the basic proficiencies to each area of learning, as well as describing their relationship to one another.

- Specialized Knowledge
 - Lower Division Courses: Automotive Service Technician Major
 - Students shall describe the scope of the field of study, its core theories and practices, using field-related terminology, and offer a similar description of the field of study per Industry Standards.
 - Students shall apply tools, technologies, and methods to selected questions or problems of the field of study per Industry Standards.
 - Students shall generate substantially error-free products, reconstructions, data, juried exhibits, or performances appropriate to the field of study per Industry Standards.
 - Upper Division Courses: Automotive Technical Studies or Business Marketing Pathway
 - Students shall define and explain the structure, styles, and practices of the field of study using its tools, technologies, methods, and specialized terms per Industry Standards.
 - Students shall investigate a familiar but complex problem in the field of study by assembling, arranging, and reformulating ideas, concepts, designs, and techniques per Industry Standards
 - Students shall frame, clarify, and evaluate complex challenges that bridges the field of study and at least one other related field, using theories, tools, methods, and academics from those fields to produce independently or collaboratively an investigative, creative, or practical work illuminating said challenge per Industry Standards.
 - Students shall construct a summative project, paper, performance, or application that draws on current research, academics, and techniques in the field of study per Industry Standards.
- Broad and Integrative Knowledge
 - Lower Division Courses: Automotive Service Technician Major
 - Students shall describe how existing knowledge or practice is advanced, tested, and revised in each core field studied, such as disciplinary and interdisciplinary courses in technology, applied sciences, social sciences, and humanities per Industry Standards.
 - Students shall describe a key debate or problem relevant to each core field studied, explain the significance of the debate or problem to the wider society, and show how concepts from the core fields can be used to address the selected debates or problems per Industry Standards.
 - Students shall use recognized methods of each core field studied, including the gathering and evaluation of evidence, in the execution of analytical, practical, or creative tasks per Industry Standards.
 - Students shall describe and evaluate the ways in which at least two fields of study define, address, and interpret the importance for society of a problem in applied science, social science, humanities, or technology per Industry Standards.
 - Upper Division Courses: Automotive Technical Studies or Business Marketing Pathway
 - Students shall describe and evaluate the ways in which at least two fields of study define, address, and interpret the importance for society of a problem in applied science, social science, humanities, or technology, and explain how the methods of inquiry in these fields can address the challenge and proposes an approach to the problem that draws on these fields per Industry Standards.
 - Students shall produce an investigative, creative, or practical work that draws on specific theories, tools, and methods from at least two core fields of study per Industry Standards.
 - Students shall define and frame a problem important to the major field of study, justify the significance of the challenge or problem in a wider societal context, explain how methods from the primary field of study can be used to address the problem, and develop an approach that draws on both the major and core fields per Industry Standards.
- Intellectual Skills
 - Lower Division Courses: Automotive Service Technician Major
 - Students shall identify and frame a problem or question in selected areas of study and distinguish among elements of ideas, concepts, theories, or practical approaches to the problem or question per Industry Standards.
 - Students shall identify, categorize, evaluate, and cite multiple information resources so as to create projects, papers, or performances in either a specialized field of study or with respect to a general theme within applied science, social science, humanities, or technology per Industry Standards.
 - Students shall describe how knowledge from different cultural perspectives might affect interpretations of prominent problems in politics, society, and global relations per Industry Standards.
 - Students shall describe, explain, and evaluate the sources of his/her own perspective on selected issues in culture, society, politics, or global relations, and compare that perspective with other views per Industry Standards.
 - Students shall describe the ethical issues present in prominent problems in politics, economics, health care, technology, or frameworks that help to inform decision-making with respect to such issues per Industry Standards.
 - Students shall present accurate interpretations of quantitative information on political, economic, health-related, or technological topics and explain how both calculations and symbolic operations are used in those offerings per Industry Standards.
 - Students shall create and explain graphs or other visual depictions of trends, relationships, or changes in status per Industry Standards.
 - Students shall develop and present valid, coherent, and substantially error-free writing

- for communication to general and specialized audiences per Industry Standards.
 - Students shall demonstrate effective interactive communication through discussion by actively listening, constructively responding, and through structured oral presentations to general and specialized audiences per Industry Standards.
 - Students shall negotiate with peers to develop an action plan for a practical task, and communicate the results of the negotiation either orally or in writing per Industry Standards.
- Upper Division Courses: Automotive Technical Studies or Business Marketing Pathway
 - Students shall differentiate and evaluate theories and approaches to selected complex problems within the chosen field of study and at least one other field per Industry Standards.
 - Students shall locate, evaluate, incorporate, and properly cite multiple information resources in different media or different languages in projects, papers, or performances per Industry Standards.
 - Students shall generate information through independent or collaborative inquiry and uses that information in a project, paper, or performance per Industry Standards.
 - Students shall construct a written project, laboratory report, exhibit, performance, or community service design expressing an alternate cultural, political, or technological vision, and explain how this vision differs from current realities.
 - Students shall frame a controversy or problem within a field of study in terms of at least two political, cultural, historical, or technological forces, explore and evaluate competing perspectives on the controversy or problem, and presents a reasoned analysis of the issue, either orally or in writing, that demonstrates consideration of the competing views per Industry Standards.
 - Students shall analyze competing claims from a recent discovery, scientific contention, or technical practice with respect to benefits and harms to those affected, articulate the ethical dilemmas inherent in the tension of benefits and harms, and either arrive at a clearly expressed reconciliation of that tension that is informed by ethical principles, or explain why such a reconciliation cannot be accomplished per Industry Standards.
 - Students shall identify and elaborate key ethical issues present in at least one prominent social or cultural problem, articulate the ways in which at least two differing ethical perspectives influence decision making concerning those problems, and develop and defend an approach to productively address the ethical issue per Industry Standards.
 - Students shall translate verbal problems into mathematical algorithms so as to construct valid arguments using accepted symbolic systems of mathematical reasoning, and presents the resulting calculations, estimates, risk analyses, or quantitative evaluations of public information in papers, projects, or multimedia presentations per Industry Standards.
- Students shall construct mathematical expressions where appropriate for issues initially described in non-quantitate terms per Industry Standards.
- Students shall construct sustained, coherent arguments, narratives, or detailed explanations of issues, problems, or technical issues and processes in writing and at least in one other medium to general and specific audiences per Industry Standards.
- Students shall conduct an inquiry concerning information, conditions, technologies, or practices in the field of study that makes substantive use of non-English-language sources per Industry Standards.
- Students shall negotiate with one or more collaborators to advance an oral argument or articulate an approach to resolving a social, personal, or ethical dilemma per Industry Standards.
- Applied and Collaborative Learning
 - Lower Division Courses: Automotive Service Technician Major
 - Students shall describe in writing at least one case in which knowledge and skills acquired in academic settings may be applied to a field-based challenge, and evaluate the learning gained from the application per Industry Standards.
 - Students shall analyze at least one significant concept or method in the field of study in light of learning outside the classroom per Industry Standards
 - Students shall locate, gather, and organize evidence regarding a question in a field-based venue beyond formal academic study and offer alternate approaches to answering the question per Industry Standards.
 - Students shall demonstrate the exercise of any practical skills crucial to the application of expertise per Industry Standards.
 - Upper Division Courses: Automotive Technical Studies or Business Marketing Pathway
 - Students shall prepare and present a project, paper, exhibit, performance, or other appropriate demonstration linking knowledge or skills acquired in work, community, or research activities with knowledge acquired in one or more fields of study, explain how those elements are structured, and employ appropriate citations to demonstrate the relationship of the product to literature of the field per Industry Standards.
 - Students shall negotiate a strategy for group research or performance, document the strategy so that others may understand it, implement the strategy, and communicate the results per Industry Standards.
 - Student shall write a design, review, or illustrative application for an analysis or case study in an applied scientific, social scientific, technical, or business context per Industry Standards.
 - Student shall complete a substantial project that evaluates a significant question in the field of study, including an analytic narrative

- of the effects of learning outside the classroom on the research or practical skills employed in executing the project per Industry Standards.
- Civics and Global Learning
 - Lower Division Courses: Automotive Service Technician Major
 - Students shall describe his/her own civic and cultural background, including its origins and development, assumptions, and predispositions per Industry Standards.
 - Students shall describe diverse positions, historical, and contemporary, on selected democratic values or practices, and present his/her own position on a specific problem where one or more of these values or practices are involved per Industry Standards.
 - Students shall provide evidence of participation in a community project through either a spoken or written narrative that identifies the civic issues encountered, and personal insights gained from this experience per Industry Standards.
 - Students shall identify an economic, environmental, or public health challenge spanning countries, continents, or cultures, present evidence for the challenge, and take a position on it per Industry Standards.
 - Upper Division Courses: Automotive Technical Studies or Business Marketing Pathway
 - Students shall explain diverse positions, including those representing different cultural, economic, and geographic interests, on a contested public issue, and evaluate the issue in light of both of those interests and evidence drawn from journalistic and academic publications per Industry Standards.
 - Students shall develop and justify a position on a public issue and relate this position to alternate views held by the public or within the policy environment per Industry Standards.
 - Students shall collaborate with others in developing and implementing an approach to a civic issue, evaluate the strengths and weaknesses of the processes, and describe the results per Industry Standards.
 - Students shall identify a significant issue affecting countries, continents, or cultures, present quantitative evidence of that challenge through tables and graphs, and evaluate the activities of either non-governmental organizations or cooperative inter-governmental initiatives in addressing identified issue(s) per Industry Standards.

