

CURRICULUM STANDARD

Effective Term
Fall 2008
[2008*03]

Curriculum Program Title

Race Car Technology

Code

A60400

Concentration

(not applicable)

Curriculum Description

The Race Car Technology curriculum is designed to educate students in the art of building and maintaining all aspects of a racing car or truck. Students will also be able to demonstrate blueprint reading and perform basic welding skills.

Course work includes racing engine assembly, racing engine preparation, chassis fabrication, sheet metal fabrication, blueprint reading, welding, race car set-up, record keeping of race car technology, and other related topics. Students will develop skills through classroom and shop/lab activities.

Graduates should qualify for employment as an entry-level engine preparation specialist, engine assembly specialist, chassis fabricator and welder, chassis set-up technician, interior sheet metal fabricator, and general race car preparation technician.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

**Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration (if applicable).** A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Race Car Technology A60400

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE <i>Courses required for the diploma are designated with *</i> Required Courses: *RCT 110 Introduction to Racing 2 SHC *RCT 141 Basic Race Car Susp/Steer 4 SHC *RCT 254 Racing Chassis Fab 5 SHC RCT 256 Race Car Set-up 5 SHC Required Subject Areas: *Engines/Drivetrain: Select a minimum of 8 SHC RCT 115 Race Engines Fundamentals 5 SHC RCT 131 Racing Man/Trans/Pwtrains 3 SHC RCT 161 Basic Race Car Elect Sys 4 SHC RCT 181 Perf Engine Elect Sys 2 SHC RCT 183 Perf Engine Fuel Sys 2 SHC RCT 252 Racing Engine Preparation 6 SHC RCT 253 Racing Engine Accessories 4 SHC *Fabrication: Select a minimum of 4 SHC WLD 110 Cutting Processes 2 SHC RCT 121 Race Car MIG Welding 3 SHC RCT 151 Basic Race Car Brake Sys 3 SHC RCT 231 Race Car TIG Welding 4 SHC RCT 255 Racing Sheet Metal Fab 2 SHC	28 SHC	23 SHC	12 SHC
B. CONCENTRATION <i>(Not Applicable)</i>			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> ACA, AUB, AUT, BPR, BUS, CIS, COE, CTS, DEA, DFT, GRD, HYD, MAC, MEC, MSM, PHY, RCT, and WLD <i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i>			