

# CURRICULUM STANDARD

*Effective Term*  
Fall 2020  
[2020\*03]

Curriculum Program Title	<b>Boat Manufacture and Service (Diploma)</b>	Program Code	<b>D60330</b>
Concentration	<b>(not applicable)</b>	CIP Code	<b>47.0616</b>

## ***Curriculum Description***

The Boat Manufacture and Service Technology program prepares students for employment in the manufacture and service of boats. Students learn the basics of boat design and the implementation of those designs in various components and/or complete boats or yachts.

Course work includes reading and interpreting marine blueprints, manuals, and other documents common to the industry; lofting; constructing forms and mold-making; application of concepts and techniques in composite, and fiberglass; marine woodworking; interior finishing; and marine mechanical, electrical, and plumbing systems.

Graduates may find employment with boat/yacht manufacturers, service yards, dealerships doing commissioning work, and companies doing custom boat building.

## ***Curriculum Requirements\****

*[for associate degree, diploma, and certificate programs in accordance with 1 D SBCCC 400.10]*

- 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-based learning 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.

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

\*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

- 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-based learning 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.

### Boat Manufacture and Service (Diploma) D60330

	AAS	Diploma	Certificate																																																																				
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>																																																																				
<p><b>A. CORE</b></p> <p><b>Required Courses. Select a minimum of 12 hours:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">BMS</td><td style="width: 10%;">110</td><td style="width: 70%;">Intro to Marine Woodwork</td><td style="width: 10%; text-align: right;">3 SHC</td></tr> <tr><td>BMS</td><td>111</td><td>Marine Joinery</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>BMS</td><td>112</td><td>Marine Blueprints/Lofting</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>BMS</td><td>113</td><td>Hull &amp; Deck Construction</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BTB</td><td>110</td><td>Fiberglass Boat Bldg I</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BTB</td><td>111</td><td>Fiberglass Boat Bldg II</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BTB</td><td>112</td><td>Fiberglass Boat Repairs</td><td style="text-align: right;">3 SHC</td></tr> </table> <p><b>Required Subject Area. Select a minimum of one subject area:</b></p> <p><b>Composite Boat Manufacturing. Select a minimum of 13 SHC:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">BMS</td><td style="width: 10%;">114</td><td style="width: 70%;">Intro to Composites</td><td style="width: 10%; text-align: right;">3 SHC</td></tr> <tr><td>BMS</td><td>115</td><td>Tooling/Mold Construction</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BMS</td><td>116</td><td>Composite Production</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BMS</td><td>117</td><td>Marine Spray Finishing</td><td style="text-align: right;">2 SHC</td></tr> </table> <p><b>Marine Services. Select a minimum of 12 SHC:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">BTB</td><td style="width: 10%;">106</td><td style="width: 70%;">Engine Install/Systems</td><td style="width: 10%; text-align: right;">5 SHC</td></tr> <tr><td>BTB</td><td>107</td><td>Boat Electrical Systems</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BTB</td><td>108</td><td>Boat Plumbing Systems</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>MRN</td><td>121</td><td>Marine Engines</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>MRN</td><td>147</td><td>Marine Power Trains</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>TRN</td><td>120</td><td>Basic Transp Electrical Sys</td><td style="text-align: right;">5 SHC</td></tr> </table>	BMS	110	Intro to Marine Woodwork	3 SHC	BMS	111	Marine Joinery	3 SHC	BMS	112	Marine Blueprints/Lofting	4 SHC	BMS	113	Hull & Deck Construction	5 SHC	BTB	110	Fiberglass Boat Bldg I	5 SHC	BTB	111	Fiberglass Boat Bldg II	5 SHC	BTB	112	Fiberglass Boat Repairs	3 SHC	BMS	114	Intro to Composites	3 SHC	BMS	115	Tooling/Mold Construction	5 SHC	BMS	116	Composite Production	5 SHC	BMS	117	Marine Spray Finishing	2 SHC	BTB	106	Engine Install/Systems	5 SHC	BTB	107	Boat Electrical Systems	5 SHC	BTB	108	Boat Plumbing Systems	4 SHC	MRN	121	Marine Engines	4 SHC	MRN	147	Marine Power Trains	4 SHC	TRN	120	Basic Transp Electrical Sys	5 SHC		<b>25-26 SHC</b>	
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<p><b>C. OTHER MAJOR HOURS</b></p> <p><i>To be selected from the following prefixes</i></p> <p>ATR, BMS, BTB, BUS, CIS, DDF, DFT, ELN, FBG, HET, ISC, MPS, MRN , TRN and WBL</p> <p><i>Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.</i></p>																																																																							