

**BLUEGRASS COMMUNITY AND TECHNICAL COLLEGE**

**Construction Technology  
Associate in Applied Science**  
Academic Plan Code - 4602017029

**Description:**

The Construction Technology program is designed to prepare students for entry level positions in the construction industry. Residential and light commercial construction applications are taught. This program includes instructional units in blueprint reading, building site layout procedures, foundation systems, light framing construction methods, exterior and interior finish systems, concrete forming systems and construction safety. Units of instruction are designed to include lecture and practical experience in the lab or on-site projects. This program also offers an excellent prerequisite for students that plan to pursue a career in areas such as construction management, civil engineering or architectural design.

Progression in the Construction Technology Program is contingent upon achievement of a grade of "C" or better in each technical and mathematics course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale)

Course Number	Course Title	Credit Hours
<b>General Education Core</b>		
	Writing/Accessing Information	3
MAT121 or MT 105	Business Mathematics OR higher level of Mathematics	3
	Social Interaction	3
	Heritage/Humanities/Foreign Languages	3
	Natural/Applied Science	3
	Oral Communication	3
	Computer Literacy	0-3
<b>NOTE:</b> Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.		
	<b>Subtotal Credit Hours</b>	<b>18-21</b>
<b>Technical Core or Support Courses</b>		
BRX 220	Blueprint Reading For Construction	3
CAR 126	Intro to Construction	3
CAR 127	Intro to Construction-Lab	1
CAR 140	Surveying & Foundations	3
CAR 141	Surveying & Foundations-Lab	2
CAR 190	Light Frame Construction I	3
CAR 191	Light Frame Const. I-Lab	2
CAR 196	Light Frame Construction II	3
CAR 197	Light Frame Const. II-Lab	2
CAR 200	Light Frame Construction III	3
CAR 201	Light Frame Const. III-Lab	2
CAR 298	Practicum in Construction or	2
CAR 299	Co-op in Construction	(2)
ISX 100	Industrial Safety	3

	Technical Electives listed below*	10
	<b>Subtotal Credit Hours</b>	<b>42</b>
	<b>Total Credit Hours</b>	<b>60-63</b>
<b>*Technical Electives</b>		
This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Construction Technology instructor.		
BRX 120	Basic Blueprint Reading	3
CAR 150	Construction Formwork	3
CAR 151	Construction Formwork - Lab	2
CAR 198	Special Topics in Construction	1 - 6
CAR 240	Light Frame Construction IV	3
CAR 241	Light Frame Const. IV-Lab	2
TEC 200	Technical Communications	(3)
COM 181	Basic Public Speaking	(3)
COM 252	Intro to Interpersonal Communications	(3)
MT 105	Business Mathematics	(3)
MT 110	Applied Mathematics	(3)
MT 115	Technical Mathematics	(3)
PHX 150	Introductory Physics	(3)
EFM 100	Personal Financial Management	(3)
WPP 200	Workplace Principles	(3)
CPU 100	Introduction to Computers	(3)
CPU 150	Computer Fundamentals	(3)

**Construction Technology  
Diploma  
Construction Carpenter**  
Academic Plan Code – 4602014019

Course Number	Course Title	Credit Hours
<b>General Education Core</b>		
Area 1:	Writing/Accessing Information, Oral Communications, Humanities, or Heritage	3
Area 2:	Social Science, Behavioral Science, Natural or Applied Science, or Mathematics	3
Area 3:	Computer Literacy course or demonstrated competency	3
<b>Note:</b> Computer Literacy must be demonstrated either by competency exam or by completing a computer literacy course.		
<b>Note:</b> WPP200 or EFM 100 may be taken for 3 credit hours of Social Interaction to meet the Diploma General Education requirements.		
<b>Technical Core or Support Courses</b>		
BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR140	Surveying & Foundations	3
CAR141	Surveying & Foundations-Lab	2

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CAR190	Light Frame Construction I	3
CAR191	Light Frame Const. I –Lab	2
CAR196	Light Frame Construction II	3
CAR197	Light Frame Const. II–Lab	2
CAR200	Light Frame Construction III	3
CAR201	Light Frame Const. III–Lab	2
CAR298	Practicum in Construction or	2
CAR299	Co-op in Construction	(2)
ISX100	Industrial Safety	3
	Technical Electives* (see below)	10
	<b>Subtotal Credit Hours</b>	<b>42</b>
	<b>Total Credit Hours</b>	<b>48-51</b>
<b>*Technical Electives</b>		
(This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Carpentry instructor.)		
BRX120	Basic Blueprint Reading	3
CAR150	Construction Formwork	3
CAR151	Construction Formwork - Lab	2
CAR198	Special Topics in Construction	1 - 6
CAR240	Light Frame Construction IV	3
CAR241	Light Frame Const. IV-Lab	2

**Construction Technology  
Certificates:**

Course Number	Course Title	Credit Hours
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**Carpenter Helper**

Academic Plan Code - 4602013109

BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR140	Surveying & Foundations	3
CAR141	Surveying & Foundations-Lab	2
CAR190	Light Frame Construction I – Floors and Walls	3
CAR191	Light Frame Construction I – Floors and Walls (Lab)	2
	<b>Total Credit Hours</b>	<b>17</b>

**Construction Forms Helper**

Academic Plan Code - 4602013029

BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR150	Construction Formwork	3
CAR151	Construction Formwork - Lab	2
	<b>Electives: (*Suggested Technical Electives)</b>	<b>6</b>
	<b>Total Credit Hours</b>	<b>18</b>

\*Suggested Technical Electives: (This list is not all inclusive. Other courses [technical or general education] may be taken as approved by Construction Technology Program Coordinator.

BRX120	Basic Blueprint Reading	(3)
ISX100	Industrial Safety	3
CAR140	Construction Surveying and Foundation Systems	3
CAR141	Construction Surveying and Foundation Systems-Lab	3
CAR150	Construction Formwork	3
CAR151	Construction Formwork – Lab	2
CAR190	Light Frame Construction I- Floors and Walls	3
CAR191	Light Frame Construction I- Floors and Walls-Lab	2
CAR196	Light Frame Construction II- Ceilings and Roofs	3
CAR197	Light Frame Construction II- Ceilings and Roofs-Lab	2
CAR198	Special Topics in Construction	1-6
CAR200	Light Frame Construction III- Exterior and Interior Finish	3
CAR201	Light Frame Construction III- Exterior and Interior Finish-Lab	2
CAR240	Light Frame Construction IIV – Cabinetry and Trim Carpentry Techniques	(3)
CAR241	Light Frame Construction IIV – Cabinetry and Trim Carpentry Techniques (Lab)	2

**\*Suggested General Education Electives:**

TEC200	Technical Communications	(3)
COM181	Basic Public Speaking	(3)
COM252	Intro to Interpersonal Communications	(3)
MT105	Business Mathematics	(3)
MT110	Applied Mathematics	(3)
MT115	Technical Mathematics	(3)
PHX150	Introductory Physics	(3)
EFM100	Personal Financial Management	(3)
WPP200	Workplace Principles	(3)
CPU100	Introduction to Computers	(3)
CPU150	Computer Fundamentals	(3)

**Residential Carpenter**

Academic Plan Code - 4602013059

BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR140	Surveying & Foundations	3
CAR141	Surveying & Foundations-Lab	2
CAR190	Light Frame Construction I – Floors and Walls	3
CAR191	Light Frame Construction I – Floors and Walls (Lab)	2
CAR196	Light Frame Construction II – Ceilings and Roofs	3
CAR197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
CAR200	Light Frame Construction III –	3

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	Exterior and Interior Finish	
CAR201	Light Frame Construction III – Exterior and Interior Finish (Lab)	2
CAR240	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques	3
CAR241	Light Frame Construction IV – Cabinetry and Trim Carpentry Techniques (Lab)	2
	<b>Total Credit Hours</b>	<b>32</b>

**Residential Roofer**

Academic Plan Code - 4602013069

BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR196	Light Frame Construction II – Ceilings and Roofs	3
CAR197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
	<b>Total Credit Hours</b>	<b>12</b>

**Residential Site Layout Assistant**

Academic Plan Code - 4602013079

CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR140	Surveying & Foundations	3
CAR141	Surveying & Foundations-Lab	2
	<b>Electives:</b> *Suggested Technical Electives	6
	<b>Total Credit Hours</b>	<b>15</b>

\*Suggested Technical Electives: (This list is not all inclusive. Other courses (technical or general education) may be taken as approved by Construction Technology Program Coordinator.

BRX120	Basic Blueprint Reading	(3)
BRX220	Blueprint Reading for Construction	(3)
ISX100	Industrial Safety	(3)
CAR150	Construction Formwork	(3)
CAR151	Construction Formwork-Lab	(2)
CAR190	Light Frame Construction I-Floors and Walls	(3)
CAR191	Light Frame Construction I-Floors and Walls Lab	(2)
CAR196	Light Frame Construction II-Ceilings and Walls	(3)
CAR197	Light Frame Construction II-Ceilings and Walls-Lab	(2)
CAR198	Special Topics in Construction	(3)
CAR200	Light Frame Construction III-Exterior and Interior Finish	(1-6)
CAR201	Light Frame Construction III-Exterior and Interior Finish-Lab	(3)
CAR240	Light Frame Construction IV-Cabinetry and Trim Carpentry Techniques	(3)
CAR241	Light Frame Construction IV-Cabinetry and Trim Carpentry	(2)

(Courses are listed by category and not necessarily in the order to be taken)

	Techniques-Lab	
TEC200	Technical Communications	(3)
COM181	Basic Public Speaking	(3)
COM252	Intro to Interpersonal Communications	(3)
MT105	Business Mathematics	(3)
MT110	Applied Mathematics	(3)
MT115	Technical Mathematics	(3)
PHX150	Introductory Physics	(3)
EFM100	Personal Financial Management	(3)
WPP200	Workplace Principles	(3)
CPU100	Introduction to Computers	(3)
CPU150	Computer Fundamentals	(3)

**Rough Carpenter**

Academic Plan Code - 4602013089

BRX220	Blueprint Reading for Construction	3
CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
CAR140	Surveying & Foundations	3
CAR141	Surveying & Foundations-Lab	2
CAR190	Light Frame Construction I – Floors and Walls	3
CAR191	Light Frame Construction I – Floors and Walls (Lab)	2
CAR196	Light Frame Construction II – Ceilings and Roofs	3
CAR197	Light Frame Construction II – Ceilings and Roofs (Lab)	2
	<b>Total Credit Hours</b>	<b>22</b>

**Basic Carpenter**

Academic Plan Code – 4602013139

CAR126	Intro to Construction	3
CAR127	Intro to Construction-Lab	1
	<b>Electives:</b> (Any five [5] additional Credit Hours, program or otherwise)	5
	<b>Total Credit Hours</b>	<b>9</b>