

GIWAAKAA'IGEMIN

We build.



RESIDENTIAL CARPENTRY & INTEGRATED RESIDENTIAL BUILDER DIPLOMA & A.A.S. DEGREE

Our **Residential Carpentry** certificate program is a two semester commitment in residential construction. LLTC faculty will prepare students in the process and methods used in the installation and maintenance of structures through project based learning.

Our **Integrated Residential Builder** A.A.S degree program is a holistic response to climate change, energy poverty and the disappearance of our natural resources. We train our students to use building science, renewable energy and a whole house systems approach to construction, while preserving our Ojibwe core values. The IRB program builds upon the Residential Carpentry diploma and is geared towards those who are interested in a multidiscipline approach to construction. Graduates of the IRB A.A.S. Program will have working knowledge of a variety of sustainable energy technologies including solar, permaculture design, building envelope, and heating/cooling system alternatives.

Graduates will be able to:

- Demonstrate the proper use of hand and power tools.
- Estimate amount of material needed to complete building projects.
- Layout a building site and construct exterior wall sections and roofing according to a building plan.
- Install walls and ceilings, doors and trim, and cabinets and special built-ins according to building plan.
- Evaluate the most appropriate building science applications to a building project.

Integrated Residential Builder careers may include:

- Construction Laborers and Helpers
- Carpenters Union
- Journeyman Apprenticeships
- Drywall and Ceiling Tile Installers and Tapers
- Flooring Installers and Tile Setters
- Wood Products/Wood Manufacturing
- Building Contractor/Entrepreneur
- Masonry Workers
- Furniture and Cabinet Manufacturer
- Building Systems Analyst
- Weatherization Technician
- Welder Certification
- Solar Installer Certification
- Green Technology Technician



Residential Carpentry & Integrated Residential Builder 2023-2025 Program of Study

General Education Courses: 14 credits			Cr.	Pre-Req	Term	CK
*	EDU 140	Professional Skills Development	3		Spring	
	FOR 101	Introduction to Forestry	3		Spring	
*	MATH 100	Technical Math	4	MATH 094	Fall	
	OJI 101	Speaking Ojibwe I	4		FA/SP	

Integrated Residential Builder Program Requirements: 45-47 credits			Cr.	Pre-Req	Term	CK
*	BLTD 100	Construction Codes	1		Spring	
*	BLTD 110	Blueprint Reading and Construction Estimating	2		Spring	
*	BLTD 114	Construction Safety	2		Fall	
*	CARP 112	Welding I	2		Interm.	
*	CARP 114	Framing Sustainable Design I	5		Fall	
*	CARP 116	Foundation & Footing Design	3		Fall	
*	CARP 120	Interior & Exterior Finishes	5		Spring	
	CARP 200	Weatherization Applications in Building	2		Fall	
	CARP 206	Framing Sustainable Design II	3		Spring	
	CARP 214	3D Layout for Shop & Construction	2		Fall	
	CARP 216	Woodworking	2		Spring	
	CARP 226	Framing Sustainable Design III	3		Fall	
	CARP 297	Carpentry Internship	1-3		Interm.	
*	ENER 150	Introduction to Renewable Energy	3		Fall	
	ENER 160	Sustainable Landscape Design & Site Planning	3		Spring	
	ENER 200	Residential Mechanical Systems	3		Spring	
	ENER 210	Introduction to Solar Energy	3		Fall	

Non-Course Requirement						
*	CPR & First Aid			<input type="checkbox"/> Met <input type="checkbox"/> Not Met		
			Total=	59-61 Credits		

* Complete these courses for the Residential Carpentry one-year certificate.
 Please note that some of the pre-req's may be completed based on competency.

