

**#1 - Please indicate the training levels required for consideration as an Intern, New Hire**

Course #	Course	Hours	Description	Credential / Testing	Internship	Hire
ZMTT 100	BASIC CNC OPERATION	150	Teaches skills to operate a CNC mill, CNC lathe and CNC grinder. <ul style="list-style-type: none"> <li>• CNC mill, lathe and grinder setup and operation</li> <li>• Tool identification, set-up, use and maintenance</li> <li>• Fixture set-up and operation</li> <li>• CNC troubleshooting and maintenance for operators</li> <li>• Precision measurement and gauging</li> <li>• Print reading, Geometric dimensioning and tolerancing</li> <li>• Machining processes</li> <li>• Statistical process control, Quality and cycle time optimization</li> <li>• CNC program operation</li> <li>• OSHA 10 Hour General Industry Training</li> </ul>	NIMS Level I: CNC Mill Operation. OSHA 10-hour		
ZMTT 105	INTRODUCTION TO MACHINING	75	Theoretical and practical aspects of shop safety, hand tools, precision layout, precision measuring instruments, taps, dies, files, reamers, and identification and use of appropriate materials to manufacture parts.	NIMS Level I: Measurement, Materials and Safety; Layout and Bench work.		
ZMTT 110	BASIC MACHINE TOOLS	75	Teaches skills to use basic machine tools. Basic operations of the drill press, pedestal grinder and band saw will be covered.	NIMS Level I: Drill Press.		
ZMTT 157	TURNING TECHNOLOGY LEVEL I	75	Provide students with the knowledge, practical learning experience and accident prevention awareness required to perform conventional lathe job planning, set-up and operation. Covers conventional, carbide and other tooling materials selection, preparation, and usage.	NIMS Level I: Turning between Centers and Chucking.		
ZMTT 158	MILLING TECHNOLOGY LEVEL I	75	Provide students with the knowledge and skills necessary to identify and safely use various milling cutters and tools. Covers conventional milling machine parts, control and techniques for safe operation and high degree of accuracy.	NIMS Level I: Milling.		
ZMTT 180	CNC PROGRAMMING	75	Introduce students to "G" and "M" code programming for Milling and Turning. Covers theory with quizzes designed to successfully start programming CNC Mills and Turning Centers.			
ZMTT 132	BLUEPRINT READING	75	Provide students with necessary skills needed to interpret part drawings. Emphasis will be placed on stimulating the students' creativity and the ability to visualize the drawn object.			
ZMTT 107	ENGINEERING GRAPHICS WITH SOLIDWORKS	45	Learn to use Solidworks to draw 3d part models, 2d part drawings, parametric parts, part assemblies and basic simulation. Exercises include sketching, extruding parts, editing parts, moving assemblies and SimulationXpress.			
ZMTT 225	TURNING TECHNOLOGY LEVEL II - MTT 225	75	Provide students with knowledge, practical learning experience and accident prevention awareness required to perform advanced conventional lathe job planning, set-up and operation. Aspects of conventional, carbide and other tooling materials selection, preparation, and usage will be covered.	NIMS Level II: Turning between Centers and Chucking.		
ZMTT 212	MILLING TECHNOLOGY LEVEL II	75	Provide students with advanced knowledge and skills necessary to identify and safely use various milling cutters and other tools that are adaptable to milling machines. Students learn to set up work pieces to be properly machined. This course covers milling machine parts and controls and their functions so that students can safely operate the machines with a high degree of accuracy.	NIMS Level II: Milling.		
ZMTT 185	CNC MILL LEVEL I	75	Learn FANUC "G" and "M" code programming along with set-up and operation of CNC Milling Centers. Teaches CNC Programming, Set-up and Operation for Machining Centers.	NIMS CNC Milling Level 1 Programming and Operation exam		
ZMTT 272	CNC MILLING II	75	Learn FANUC MACRO Programming.	NIMS CNC Milling Level II Programming and Operation exam		
ZMTT 288	CAM PROGRAMMING	75	Covers CAM programming using MasterCAM software. Learn to create 2D mill, 3D mill and lathe part geometries and toolpaths.			
ZMTT 310	AUTOCAD	Instructor Led, 12 weeks; 36 hours	For the new AutoCard user who needs comprehensive training in AutoCad, edit and publish drawings with AutoCard. No previous Cad experience necessary. Drafting, design or engineering experience a plus.			
ZMTT 101	BASIC CNC LATHE OPERATION	30	Provides students with the basic set up and operation of CNC lathes.	NIMS Level I CNC Lathe Operation		
ZMTT 221	GRINDING TECHNOLOGY	75	Teaches the theoretical and the practical skills development in precision grinding operations. Covers a variety of surface and form grinders, applying various techniques to make metal parts to blueprint specifications.	NIMS Level I & Level II: Grinding.		
ZMTT 276	ADVANCED CNC TURNING	75	Teaches students FANUC "G" and "M" code programming along with set-up and operation of CNC Turning Centers.	NIMS CNC Turning Level 1 Programming and Operation exam.		
ZMTT 265	CNC FIXTURE DESIGN	45	Use CAD software to design various jigs and fixtures for production. Different design features and methods will be discussed.			

**#2 - Identify additional courses you would like to see RACC provide to train your current employees and new hires.**