

Career Clusters

Manufacturing is one of the 16 Career Clusters identified by the U.S. Department of Education and adopted by the State of Alabama. These Career Clusters represent more than 79 career pathways with the purpose of assisting students in navigating their way successfully in college and careers.

The Alabama Department of Labor further defines these career pathways by selecting common occupations with related education requirements, work experience, wages and typical training needed, as defined by the U.S. Bureau of Labor Statistics. Included in this pamphlet are the high skilled, high demand, and high wage occupations associated with Manufacturing.



Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Earnings

ALABAMA STATEWIDE SELECTED OCCUPATIONS	SALARY		
Occupation	Entry	Average	Experienced
Engine and Other Machine Assemblers	\$25,174	\$35,687	\$40,944
Computer-Controlled Machine Tool Operators, Metal and Plastic	\$24,041	\$33,367	\$38,029
Team Assemblers	\$19,779	\$33,751	\$40,737
Machinists	\$23,708	\$38,512	\$45,914
Industrial Machinery Mechanics	\$33,570	\$48,790	\$56,400
Tool and Die Makers	\$33,479	\$46,754	\$53,392
Welders, Cutters, Solderers, and Brazers	\$25,807	\$36,883	\$42,389
Maintenance Workers, Machinery	\$24,262	\$37,821	\$44,600
Production, Planning, and Expediting Clerks	\$29,339	\$46,020	\$54,361
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$38,922	\$52,655	\$59,521
Medical Equipment Repairers	\$28,462	\$44,244	\$52,135
Mechanical Engineering Technicians	\$32,093	\$51,895	\$61,795
Industrial Engineering Technicians	\$37,603	\$57,511	\$67,466
Industrial Production Managers	\$61,557	\$93,496	\$109,465

Employment

ALABAMA STATEWIDE SELECTED OCCUPATIONS	TOTAL EMPLOYMENT		
Occupation	2012	2022	Average Annual Openings
Engine and Other Machine Assemblers	2,150	3,440	165
Computer-Controlled Machine Tool Operators, Metal and Plastic	2,060	2,720	125
Team Assemblers	29,770	36,220	1,115
Machinists	6,020	7,220	260
Industrial Machinery Mechanics	9,300	11,140	455
Tool and Die Makers	740	860	15
Welders, Cutters, Solderers, and Brazers	9,000	10,270	350
Maintenance Workers, Machinery	800	910	20
Production, Planning, and Expediting Clerks	2,630	2,770	80
Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,920	1,940	40
Medical Equipment Repairers	660	870	40
Mechanical Engineering Technicians	580	680	20
Industrial Engineering Technicians	890	970	25
Industrial Production Managers	2,810	2,900	60

Education

HIGH SCHOOL OR LESS

Occupation	Work Experience	Job Training
Engine and Other Machine Assemblers	■	●
Computer-Controlled Machine Tool Operators, Metal and Plastic	■	●
Team Assemblers	■	●
Machinists	■	●
Industrial Machinery Mechanics	■	●
Tool and Die Makers	■	●
Welders, Cutters, Solderers, and Brazers	■	●
Maintenance Workers, Machinery	■	●
Production, Planning, and Expediting Clerks	■	●

SOME COLLEGE – ASSOCIATE'S DEGREE

Electrical and Electronics Repairers, Commercial and Industrial Equipment	■	●
Medical Equipment Repairers	■	●
Mechanical Engineering Technicians	■	○
Industrial Engineering Technicians	■	○

BACHELOR'S DEGREE AND ABOVE

Industrial Production Managers	▲	○
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Typical On-the-Job Training Needed to Attain Competency	Work Experience in a Related Occupation
None	○ More than 5 years ▲
Short-term On-the-Job Training	● 1 to 5 years ▼
Moderate-term On-the-Job Training	● Less than 1 year ▼
Long-term On-the-Job Training	● None ■
Apprenticeship	◆
Internship/Residency	▲

Career Snapshot

The occupations reporting the highest average salaries include Industrial Production Managers, Industrial Engineering Technicians, and Electrical & Electronics Repairers, Commercial & Industrial Equipment. Industrial Production Managers require a Bachelor's degree or higher and more than 5 years of experience in a related occupation, Industrial Engineering Technicians and Electrical & Electronics Repairers, Commercial & Industrial Equipment, require some college to an Associate's degree. Electrical & Electronics Repairers, Commercial & Industrial Equipment, are also required to complete long-term on-the-job training.

The occupations reporting the highest average annual openings require a high school degree, or less. These include Team Assemblers, Industrial Machinery Mechanics, and Welders, Cutters, Solderers, & Brazers. Team Assemblers and Welders, Cutters, Solderers, & Brazers require moderate-term on-the-job training, whereas Industrial Machinery Mechanics require long-term on-the-job training.

Occupation(s) also noted as High Demand: Engine & Other Machine Assemblers**; Computer-Controlled Machine Tool Operators, Metal & Plastic; Team Assemblers; and Industrial Machinery Mechanics

**Fast Growing Occupations

Career Clusters

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing, Sales & Service
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

For more information regarding
Career Clusters, visit:
www.careertech.org/career-clusters
www.altechprep.org/clusters.html

For Occupational Videos, visit:
www2.labor.alabama.gov/videos



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*Average Annual Salary Source:
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A glance into the world of...



Alabama Department of Labor
Labor Market Information Division

