The North Alabama Advanced Manufacturing Technology Education Collaborative (NAMTEC)

A Drake State Partnership with Science and Engineering Services and Huntsville City Schools



Advanced Manufacturing Technology

- Launched summer term 2014
- Combines
 - precision machining,
 - 3D engineering design,
 - mechatronics,
 - welding,
 - robotics,
 - additive manufacturing,
 - polymer technology,
 - quality assurance and lean manufacturing





K-12 Partners

- Huntsville City Schools Advanced Manufacturing Academies
 - Grissom High School
 - Jemison High School
- Madison County Schools
 - Madison County Career Tech Center
- Dual Enrollment and Shared Facilities





Manufacturing Partners

- Science and Engineering Services, LLC
- Parker Hannifin
- Strata-G Solutions, Inc.
- Dynetics, Inc.
- Adept Technologies
- Wyle CAS Group
- Yulista





Apprenticeships Available

- SES: 16 hours per week
- Parker Hannifin: variable
- Dynetics: variable
- Adept Technologies: variable
- Wyle CAS Group: variable





Curriculum Design

Advanced Manufacturing

ERP Systems Computer-Aided Manufacturing Metrology 3-D Design and Rapid Prototyping Additive Manufacturing

Mechatronics

Electrical Systems and Controls Mechanical and Fluid Systems

Manufacturing

Metal and Plastic Forming and Shaping

Surface Finishing and Coating

Manufacturing Fundamentals

Manufacturing Processes

Industrial Safety

Blueprint Reading

Mechanical and Fluid Systems

Oral Communication

Critical Thinking

Applied Mathematics

Quality

Written Communication





Degree and Certificate Options

- Associate Degree in Advanced Manufacturing
 - With option in _____
- Stackable certificates available in welding, industrial maintenance, robotics, electrical technology, PLCs, 3D design and prototyping, machine shop, CNC milling and turning
- Industry certifications: NIMS, NCCER,





Students and Training

- Enrollment in program: 153 students
- SES Manufacturing Apprenticeship
- 3D Design and Rapid Prototyping
- Robotics Programming and Troubleshooting
- Welding Technology









Q & A



