

# CURRICULUM STANDARD

Effective Term  
Fall 2003  
[2003\*03]

Curriculum Program Title

**Manufacturing Technology**

Code

**A5032A**

Concentration

**Plastics**

## *Curriculum Description*

Plastics is a concentration under the curriculum title of Manufacturing Technology. This curriculum provides training in all aspects of the polymer processing industry, one of today's fastest growing manufacturing technologies. It will prepare individuals for employment by utilizing the latest technologies in both plastics materials and plastics processing.

Course work includes rigorous study of the polymer processing industry, including materials technology, injection molding, extrusion, thermoforming, blow molding, and other related areas. Students will also gain knowledge in machine operation, maintenance, setup, design and research, quality assurance, and safety.

Graduates should qualify for employment in the design and/or production of plastic-related items including such job titles as molding technician, estimator, QC technician, setup technician, or supervisor.

## *Curriculum Requirements\**

*[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]*

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
<b>Total Semester Hours Credit (SHC)</b>	<b>64-76</b>	<b>36-48</b>	<b>12-18</b>

*\*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*



**Manufacturing Technology/Plastics A5032A (Cont)**

**C. OTHER MAJOR HOURS**

*To be selected from the following prefixes:*

ATR, BPR, CIS, COE, CSC, DFT, ELC, ELN, FUR, HYD, ISC, MAC,  
MEC, OMT, PLA, TEX, and WLD

*Foreign language courses (including ASL) that are not designated as  
approved other major hours may be included in all programs up to a  
maximum of 3 semester hours of credit.*