

Chemical Laboratory Technician Short-Term Certificate 410301 CHM

Available: Phil Campbell and Shoals Campuses
 Advisors: C. Sockwell (5378) sockwell@nwscc.edu
 M. Murphy (6246) docm@nwscc.edu

The Chemical Laboratory Technician short-term emphasizes chemistry and mathematics. The holder of this certificate will have completed 8 semester hours of chemistry and will be exposed to many different areas of chemistry. These areas include fundamental concepts of chemistry, chemical equations and reaction, stoichiometry, thermochemistry, atomic structure, general concepts of chemical bonding, Valence Bond Theory, Molecular Orbital Theory, chemistry of gases and kinetic theory, acids and bases, chemical equilibrium, and chemical thermodynamics. The material covered in the courses, along with skills developed in the laboratory, prepares the student for a wide range of employment possibilities, from industrial laboratories to environmental testing.

For those students who wish to continue their education, these courses are transferable.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Semester		
	Theory	Lab	Hours
BIO 103 Principles of Biology I	3	2	4
CHM 111 College Chemistry I	3	3	4
CHM 112 College Chemistry II	3	3	4
**ENG 101 English Composition I	3	0	3
ENG 130 Technical Report Writing	3	0	3
MTH 112 Precalculus Algebra	3	0	3
MTH 265 Elementary Statistics	3	0	3
Total Semester Credit Hours			24

**Keyboarding skills are essential for the successful completion of English 101.

Child Development Associate in Applied Science Degree 190708 CHD

Available: Phil Campbell and Shoals Campuses
 Advisors: D. Durdunji (5450) durdunji@nwscc.edu
 D. Pace (5352) pace@nwscc.edu

This degree is designed to prepare students for employment as teachers or directors in public or private preschool programs, as Head Start teachers or teacher aides, or as teacher assistants in Alabama Pre-K programs, public or private schools. Courses in this program extend beyond the Alabama State Minimum Standards qualifications for directors, program directors, and preschool teachers in licensed child care facilities.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

General Education Requirements	Semester Hours
BIO 103 Principles of Biology I	4
BIO 104 Principles of Biology II or Physical Science	4
CIS 146 Microcomputer Applications	3
**ENG 101 English Composition I	3
ENG 102 English Composition II	3
MTH 116 Mathematical Applications or MTH 110 or MTH 112	3
PSY 200 General Psychology	3
SOC 200 Introduction to Sociology	3
SOC 247 Marriage and the Family	3
SPH 107 Fundamentals of Public Speaking	3
Fine Arts Elective	3
Total Education Requirements	35

Major Requirements	
CHD 100 Introduction to Early Care and Education of Children	3
CHD 201 Child Growth and Development	3
CHD 202 Creative Experiences for Young Children	3
CHD 203 Children's Language Development and Literature	3
CHD 204 Methods and Materials for Teaching Young Children	3
CHD 206 Health, Safety and Nutrition	3
CHD 205 Program Planning for Young Children	3
CHD 208 Administration of Child Development Programs	3
CHD 209 Infant and Toddler Education Programs	3
CHD 210 Educating Exceptional Young Children	3
CHD 215 Supervised Practical Experience	3
Total Major Requirements	33

Total Semester Credit Hours

68
 **Keyboarding skills are essential for the successful completion of English 101.

**Child Development
Short-Term Certificate** 190708 CHD

Available: Phil Campbell and Shoals Campuses
 Advisors: D. Durdunji (5450) durdunji@nwsc.edu
 D. Pace (5352) pace@nwsc.edu

This short-term certificate is designed to prepare students for employment in preschool programs. Emphasis is upon developing competency in guiding the experience of preschool children. Graduates may be employed as teachers or directors in private and public preschool programs; and as aides in Head Start.

Classes in this plan are designed to meet the Alabama state minimum standard qualifications for a director, program director, and teacher in a licensed child care center.

This certificate program offers the student background knowledge of all stages of child growth and development; training and practical experience in conducting all types of learning activities with children; knowledge and application of techniques in positive guidance and discipline, health, safety, and first aid practices, and a basic knowledge of the state minimum standards for daycare centers and homes.

Any person who has an interest in or a desire to upgrade his or her knowledge in child care work and has a high school diploma or GED will be eligible for this short-term certificate.

Entering students are required to complete ORT 100. Transfer students are exempt from this requirement.

	Semester		
	Theory	Lab	Hours
CHD 201 Child Growth and Development Principles	3	0	3
CHD 202 Children's Creative Experiences	2	2	3
CHD 203 Children's Literature and Language Development	2	2	3
CHD 204 Methods and Materials for Teaching Children	2	2	3
CHD 206 Children's Health and Safety	3	0	3
CHD 205 Program Planning for Educating Young Children	3	0	3
CHD 215 Supervised Practical Experience in Early Childhood Education	0	6	3
**CHD Electives	6	0	6

Total Semester Credit Hours 27

****CHD Electives**

- CHD 100 Introduction to Early Care and Education
- CHD 208 Administration of Child Development Programs
- CHD 209 Infant and Toddler Education Programs
- CHD 210 Educating Exceptional Young Children
- CHD 214 Families and Communities in Early Care

**Computer Information Systems Technology
Associate in Applied Science Degree**

Available: Shoals Campus
 Advisors: T. James (6281) timmy.james@nwsc.edu
 T. Roberson (5276) roberson@nwsc.edu
 E. Carter (5277) cartere@nwsc.edu
 S. Chandler (5234) schandler@nwsc.edu
 J. James (6234/5346) jamesje@nwsc.edu
 P. Peters (6326) ppeters@nwsc.edu

The CIS Technology degree is designed to prepare students for employment in the field of Data and Information Processing. Graduation from high school or the equivalent qualifies a prospective student for enrollment in CIS Technology. The two-year suggested curriculum is designed to develop computer personnel capable of planning, writing and installing commercial software on modern database computers. Students pursuing the Personal Computer Systems Option will receive training in electronics and networking technology used on common PC systems. Students pursuing the Programming Option are trained on the IBM AS/400 and/or personal computers.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

Programming Option 110101 PO

General Education Requirements	Semester Hours
BUS 241 Principles of Accounting I or ACT 141 Basic Accounting Principles	3
BUS 242 Principles of Accounting II or ACT 142 Advanced Accounting Principles	3
**ENG 101 English Composition I	3
ENG 130 Technical Report Writing or ENG 102 English Composition II	3
MTH 100 Intermediate Algebra	3
SPH 226 Business and Professional Speech or SPH 107 Fundamentals of Public Speaking	3
Humanities or Fine Arts Elective	3
Social Science Elective	3
Total General Education Requirements	24

Major Requirements	Semester Hours
CIS 110 Intro to Computer Logic and Programming	3
***CIS 146 Microcomputer Applications	3
*CIS 205 Control Language and Utilities Applications	3
CIS 147 Advanced Microcomputer Applications	3
CIS 249 Microcomputer Operating Systems	3
*CIS 281 System Analysis and Design	3
*CIS 199 Network Communications or ILT 135 Local Area Networks	3
CIS 268 Software Support or ILT 130 Software Installation and Maintenance	3
CIS 269 Hardware Support or ILT 129 Personal Computer Hardware	3
CIS Programming Electives	15
CIS Elective	6
Total Major Requirements	48

Total Semester Credit Hours 72

*Courses offered during summer semester only.

**Keyboarding skills are essential for the successful completion of English 101.

***Students without prior computer knowledge or keyboarding should enroll in CIS 096.