# Northland Pioneer College

**ASSOCIATE OF APPLIED SCIENCE (AAS)**

**COMPUTER INFORMATION SYSTEMS - Computer Information Systems**

**2011-2012 Catalog Year**

*NPC Advising Checksheet - Minimum of 64-65 Credits*

<table>
<thead>
<tr>
<th>Name:</th>
<th>Student ID:</th>
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<tbody>
<tr>
<td>Advisor Name:</td>
<td>Date:</td>
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## I. GENERAL EDUCATION REQUIREMENTS (16-17 CRS)

<table>
<thead>
<tr>
<th>Communications (6 CRS)</th>
<th>CRS</th>
<th>GR</th>
<th>SEM</th>
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<tbody>
<tr>
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**OR**

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<thead>
<tr>
<th>Arts &amp; Humanities (3 CRS)</th>
<th>CRS</th>
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<th>SEM</th>
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<tbody>
<tr>
<td>ENL 109</td>
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## II. DISCIPLINE STUDIES (7 CRS)

<table>
<thead>
<tr>
<th>Physical &amp; Biological Sciences</th>
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## III. CORE REQUIREMENTS (30 CRS)

### Area of Specialization:

**Computer Information Systems**

<table>
<thead>
<tr>
<th>CIS 105</th>
<th>CRS</th>
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## IV. REQUIRED ELECTIVES (18 CRS)

In addition to the area of specialization core requirements, student must complete 18 unduplicated credits from the List of Required Electives.

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The Associate of Applied Science (AAS) Degree is designed for specialization in vocational or technical fields and requires completion of a minimum of 64 credits with a cumulative grade point average of 2.0 on a 4.0 scale.
COMMUNICATIONS (6 CREDITS)  
See specific program requirements  

MATHEMATICS (3-4 CREDITS)  
See specific program requirements  

DISCIPLINE STUDIES (7 CREDITS)--unless otherwise noted in a program description, students must take one course from Physical and Biological Sciences and one course from either Arts and Humanities or Social and Behavioral Sciences.

ARTS AND HUMANITIES  
ART 101 Understanding Art  
ART 115 Art History I  
ART 116 Art History II  
ENL 220 World Literature I  
ENL 221 World Literature II  
ENL 224 English Literature I  
ENL 225 English Literature II  
HUM 150 Humanities—Western World I  
HUM 151 Humanities—Western World II  
MUS 150 Music Appreciation  
PHL 101 Introduction to Philosophy  
PHL 105 Introduction to Ethics  
SPT 130 Introduction to Theatre  
SPT 150 Introduction to Film  
SPT 155 History of Television  

PHYSICAL AND BIOLOGICAL SCIENCES  
BIO 100 Biology Concepts  
BIO 105 Environmental Biology  
BIO 160 Intro to Human Anatomy & Physiology  
BIO 181 General Biology I  
BIO 182 General Biology II  
BIO 201 Human Anatomy and Physiology I  
BIO 202 Human Anatomy and Physiology II  
CHM 130 Fundamental Chemistry  
CHM 151 General Chemistry I  
CHM 152 General Chemistry II  
GEO 111 Physical Geography  
GLG 101 Introduction to Geology I—Physical  
GLG 102 Introduction to Geology II—Historical  
GLG 101 Introduction to Geology I—Physical  
PH 113 General Physics I  
PH 114 General Physics II  

SOCIAL AND BEHAVIORAL SCIENCES  
ANT 102 Cultural Anthropology  
BUS 140 Principles of Economics—Macro  
BUS 141 Principles of Economics—Micro  
GEO 110 World Regional Geography  
HIS 105 U.S. History to 1877  
HIS 106 U.S. History Since 1877  
HIS 155 Western Civilization to 1700  
HIS 156 Western Civilization Since 1700  
POS 110 American Government  
PSY 101 Introduction to Psychology  
PSY 200 Psychology of Adjustment  
PSY 240 Developmental Psychology  
SOC 120 General Sociology  
SOC 121 Social Problems in America  
SOC 130 Racial, Ethnic and Gender Relations  
SOC 225 Sociology of the Family  

COMPUTER INFORMATION SYSTEMS REQUIRED ELECTIVES – In addition to the area of specialization core requirements, student must complete 18 -20 unduplicated credits from the following courses:

AIS 170 Written Business Communications  
BUS 110 Small Business Management  
BUS 112 Fundamentals of Bookkeeping for Business  
CIS 103 Introduction to Windows  
CIS 105 Computer Applications and Information Technology  
CIS 111 Introduction to Programming  
CIS 116 Introduction to Graphic Communication Technology  
CIS 117 Two-Dimensional Computer Design  
CIS 118 Graphics, Interactive and Animated  
CIS 120 Intro to Business Communications  
CIS 125 Effective Communication with Digital Media  
CIS 141 Managing and Maintaining Your PC I (A+)  
CIS 142 Managing and Maintaining Your PC II (A+)  
CIS 145 Network+ Certification Preparation  
CIS 146 Managing and Maintaining Your PC II (A+)  
CIS 150 Digital Culture  
CIS 151 Digital Culture  
CIS 152 General Chemistry II  
CIS 153 General Chemistry II  
CIS 161 Microsoft Operating System  
CIS 168 Web Authoring Tools  
CIS 171 GNU Linux Operating System  
CIS 173 GNU Linux Operating System  
CIS 175 UNIX Operating System  
CIS 183 Introduction to Internet  
CIS 198 Internship  
CIS 199 Workshop  
CIS 200 BASIC Programming  
CIS 205 Introduction to Programming  
CIS 207 Introduction to Programming  
CIS 208 Introduction to Programming  
CIS 209 Introduction to Programming  
CIS 210 Introduction to Programming  
CIS 211 Introduction to Programming  
CIS 212 Introduction to Programming  
CIS 213 Introduction to Programming  
CIS 214 Introduction to Programming  
CIS 215 Introduction to Programming  
CIS 216 Introduction to Programming  
CIS 217 Java Programming, Introductory  
CIS 218 Java Programming, Introductory  
CIS 219 Java Programming, Introductory  
CIS 220 Java Programming, Introductory  
CIS 221 Java Programming, Introductory  
CIS 222 Java Programming, Introductory  
CIS 223 Java Programming, Introductory  
CIS 224 Java Programming, Introductory  
CIS 225 Java Programming, Introductory  
CIS 226 Programming in C++  
CIS 227 Programming in C++  
CIS 228 Programming in C++  
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CIS 238 Programming in C++  
CIS 239 Programming in C++  
CIS 240 Programming in C++  
CIS 241 Programming in C++  
CIS 242 Programming in C++  
CIS 243 Database-Driven Web Sites  
CIS 244 Database-Driven Web Sites  
CIS 245 Database Management and Concepts  
CIS 246 Database Management and Concepts  
CIS 247 Database Management and Concepts  
CIS 248 Database Management and Concepts  
CIS 249 Database Management and Concepts  
CIS 250 Electronic Commerce  
CIS 251 Electronic Commerce  
CIS 252 Electronic Commerce  
CIS 253 Electronic Commerce  
CIS 254 Electronic Commerce  
CIS 255 Electronic Commerce  
CIS 256 Web Programming  
CIS 257 Web Programming  
CIS 258 Web Programming  
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CIS 275 Web Server Administration  
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CIS 280 Systems Analysis and Design  
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CIS 294 Systems Analysis and Design  
CIS 295 Systems Analysis and Design  
CIS 296 Systems Analysis and Design  
CIS 297 Systems Analysis and Design  
CIS 298 Portfolio  
CIS 299 Special Projects  

Specific programs may designate or limit course options. The General Education requirements for certain programs may exceed 16 credit minimum.