# **COMPUTER SCIENCE** (Five-Year B.S. to M.S.I.S)

40 courses of three or more credits and 3 one-credit PE courses

GENERAL EDUCATION CORE	<u>MAJOR</u>
BASIC REQUIREMENTS (2 courses and 3 one-	(16 courses)
credit PE courses)	( 1 1 1 1 1 1 1 )
Composition and Rhetoric	CC 121: Intro to Computer Programming
☐ EN 103 Composition and Rhetoric I	☐ CS 121: Intro to Computer Programming
☐ EN 104 Composition and Rhetoric II	☐ CS 122: Object-Oriented Programming
Physical Education Courses	☐ CS 211: Application Development
□ PE 100	☐ CS 230: Computer Architecture and Hardware
□ PE	☐ CS 314: Operating Systems
□ PE	☐ CS 321: Communications and Networking
	☐ CS 356: Software Engineering
MODES OF THINKING (4 courses)	☐ CS 360: Database Analysis and Design
Literature (Select one)	☐ CS 416: Security
□ EN 110, EN 112, EN 115	•
Mathematics (Satisfied by Major – 121)	☐ CS 453: Senior Coordinating Seminar
Natural Science (Select one)	☐ MA 121: Calculus I
☐ BI 209, BI 210, BI 211, BI 242, CH 209,	☐ MA 122: Calculus II
PH 209	☐ MA 231: Discrete Mathematics
Philosophy	☐ MA 331: Linear Algebra
☐ PL 109	•
Social Sciences (Select one)	Two MA and/or CS courses at the 200, 300, or
☐ CJ 109, EC 209, EC 112, PO 103, PO	400 level, except MA 260 and CS 475
109, PS 109, or SO 109	
CULTURAL LITERACY (6 courses)	
Humanities I and II. <i>Preferably</i> select a set (e.g.,	□
HI 201/202). However, a combination (e.g., PO	
201 + HI 214) is acceptable.	MSIS COURSEWORK
☐ Hum. I: HI 201, PO 201, HI 213	
☐ Hum. II: HI 201, 10 201, 111 213	O
Humanities III: Great Works of Art & Music	O
(See Master Schedule of Day Classes)	
	MINOR
Humanities IV: Great Works of Literature	(6 courses)
(See Master Schedule of Day Classes)	(o courses)
`	пп
Foreign Language/World Cultures	
(Select either two of the same language, any	
two WC, or one WC and one approved	0
course with international study)	ELECTIVES
□	ELECTIVES
O	(As needed to complete 40-course req.)
	П
CHRISTIAN VALUES AND THEOLOGY	
(3 courses)	<u> </u>
Catholic Theology	
☐ TH 109	
Intermediate Theology (200/300 level TH)	
☐ TH	A Voctor Director of the Academic Becomes Courter
Values Seminar (See Moster Schedule of Day Classes)	A. Koefer, Director of the Academic Resource Center Effective fall, 2016
(See Master Schedule of Day Classes)	Effective fall, 2010

For the most up-to-date record of progress toward completion of degree requirements, students should use the Academic Evaluation tool, which is listed under the Academic Planning heading in WebAdvisor.

# DE SALES UNIVERSITY Typical Program: COMPUTER SCIENCE MAJOR (B. S.)

#### **FALL SEMESTER**

#### **SPRING SEMESTER**

#### FIRST YEAR

... or ...

Intro to Computer Programming (CS 121)

Calculus I (MA 121)

Composition and Rhetoric I (EN 103)

Philosophy MOT (PL 109)

Foreign Language/World Cultures Lifetime Fitness and Wellness (PE 100) Object-Oriented Programming (CS 122)

Calculus II (MA 122)

Composition and Rhetoric II (EN 104)

Social Science (MOT)

Foreign Language/World Cultures Physical Education (Activity)

### SECOND YEAR

Humanities 1

MA/CS Elective

Application Development (CS 211)

Literature MOT

Catholic Theology (TH 109) Physical Education (Activity) Humanities 2

Computer Arch. & Hardware (CS 230)

Natural Science MOT

Discrete Mathematics (MA 231) Database Anal & Design (CS 360)

#### THIRD YEAR

Free Elective

Communications and Networking (CS 321)

Humanities 3

Intermediate Theology MA/CS Elective

Operating Systems (CS 314) Linear Algebra (MA 331)

Humanities 4 Security (CS 416) Free Elective

## FOURTH YEAR

Software Engineering (CS 356)

Values Seminar MSIS Course MSIS Course Free Elective Senior Coordinating Seminar (CS 453)

MSIS Course MSIS Course Free Elective Free Elective

# FIFTH YEAR

<u>Summer</u>

MSIS Course

<u>Fall</u>

MSIS Course MSIS Course

Winter MSIS Course

MSIS Course MSIS Course Spring MSIS Course

MSIS Course

Summer MSIS Course

A. Koefer, Director of the Academic Resource Center

Effective fall, 2016