

# DUAL MAJOR IN COMPUTER SCIENCE AND FINANCE

## Overview

The dual major (Finance and Computer Science) is an innovative interdisciplinary curriculum that provides students with unique skills. As such, a graduate of this dual major will be able to apply computer science techniques to the finance field.

**This dual major does not constitute a dual degree.** Students will not be receiving two bachelor's degrees if they pursue this dual major. Students pursuing the Finance -Computer Science dual major must declare their degree selection as BA in Computer Science or BS in Finance.

## Major Requirements

### Bachelor of Arts in Computer Science (Dual Major with Finance)

128 credits

#### Computer Science Major Requirements

Code	Title	Credits
Mathematics Requirements		
MATH 1121	Applied Calculus I	3
MATH 1122 or MATH 2217	Applied Calculus II Statistics I	3
Computer Science Requirements		
CPSC 1101	Introduction to Computing (Satisfies Business Elective)	3
CPSC 1131	Fundamentals of Programming	3
CPSC 2304	Web Development	3
CPSC 2250L	Computer Science Sophomore Clinic	1
CPSC 2231 & 2231L	Programming Workshop and Programming Workshop Lab	4
CPSC 2232 & 2232L	Data Structures and Data Structures Lab	4
SWEG 3301	Software Engineering Methods	3
CPSC 3351L	Computer Science Junior Clinic I	1
SWEG 3302	Software Design Methods	3
CPSC 3352L	Computer Science Junior Clinic II	1
CPSC 3354	Theory of Programming Languages	3
Computer Science Electives		
CPSC/SWEG Computer Science Elective		3
Three required Computer Science Electives are met with these courses: <sup>1</sup>		
FNCE 4305 & FNCE 4320 & FNCE 4390	Financial Trading and Strategic Simulations and Financial Modeling and Seminar in Finance	
<b>Total Credits</b>		<b>38</b>

<sup>1</sup> The 9 credits for these courses are counting under Finance Major Requirement

## Dolan School of Business Core Curriculum

### Business Core Requirements

11 courses; 33 credits.

Code	Title	Credits
ACCT 1011	Introduction to Financial Accounting <sup>1</sup>	3
ACCT 1012	Introduction to Management Accounting <sup>1</sup>	3
AETH 2291	Business Ethics	3
BUSN 1101	Messaging and Persuasion: Effective Business Communication <sup>1</sup>	3
BUSN 3211	Legal Environment of Business	3
DATA 1101	Business Analytics	3
FNCE 2101	Introduction to Finance <sup>2</sup>	3
INTL 2101	Introduction to International Business	3
MGMT 2101	Introduction to Management <sup>2</sup>	3
MGMT 4300	Business Strategies in the Global Environment <sup>3</sup>	3
MKTG 1101	Principles of Marketing <sup>2</sup>	3
<b>Total Credits</b>		<b>33</b>

<sup>1</sup> These courses should be primarily taken in the first year.

<sup>2</sup> These courses should be primarily taken in the second year.

<sup>3</sup> This course may not be taken until the senior year.

### Finance Major Requirements

Code	Title	Credits
FNCE 3210	Principles of Investment	3
FNCE 3215	Financial Management	3
FNCE 4305	Financial Trading and Strategic Simulations	3
FNCE 4320	Financial Modeling (Satisfies a Computer Science Elective)	3
FNCE 4330	Case Studies in Finance (Satisfies a Computer Science Elective)	3
FNCE 4390	Seminar in Finance (Satisfies a Computer Science Elective)	3
<b>Total Credits</b>		<b>18</b>

## Plan of Study

Suggested Course of Study

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ACCT 1011	Introduction to Financial Accounting	3
ECON 1011	Introduction to Microeconomics	3
CPSC 1101	Introduction to Computing	3
MATH 1121	Applied Calculus I	3
	Modern or Classical Language course	3

First Year Experience (FYE)		0
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
ACCT 1012	Introduction to Management Accounting	3
BUSN 1101 or INTL 2101	Messaging and Persuasion: Effective Business Communication or Introduction to International Business	3
CPSC 1131	Fundamentals of Programming	3
ECON 1012	Introduction to Macroeconomics	3
ENGL 1001	Introduction to Rhetoric and Composition	3
MATH 2217	Statistics I	3
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
CPSC 2231	Programming Workshop	3
CPSC 2231L	Programming Workshop Lab	1
CPSC 2250L	Computer Science Sophomore Clinic	1
CPSC 2304	Web Development	3
DATA 1101	Business Analytics	3
DATA 1101L	Excel Certification Lab	0
FNCE 2101	Introduction to Finance	3
PHIL 1101	Introduction to Philosophy	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
BUSN 1101 or INTL 2101	Messaging and Persuasion: Effective Business Communication or Introduction to International Business	3
CPSC 2232	Data Structures	3
CPSC 2232L	Data Structures Lab	1
MGMT 2101	Introduction to Management	3
MKTG 1101	Principles of Marketing	3
RLST 1000-level		3
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
AETH 2291	Business Ethics	3
BUSN 3211	Legal Environment of Business	3
CPSC 3351L	Computer Science Junior Clinic I	1
FNCE 3210	Principles of Investment	3
HIST 1100	Origins of the Modern World Since 1500	3
SWEG 3301	Software Engineering Methods	3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
CPSC 3352L	Computer Science Junior Clinic II	1
FNCE 3215	Financial Management	3
SWEG 3302	Software Design Methods	3
CPSC/SWEG Elective		3
Literature (Literature/Classics/Modern) course		3
Visual/Performing Arts 1000-level		3
<b>Credits</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CPSC 3354	Theory of Programming Languages	3

FNCE 4305	Financial Trading and Strategic Simulations	3
FNCE 4320	Financial Modeling	3
First Natural Science course		3
History/Philosophy/Religious Studies at 2000-level <sup>1</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
FNCE 4330	Case Studies in Finance	3
FNCE 4390	Seminar in Finance	3
MGMT 4300	Business Strategies in the Global Environment	3
Second Natural Science course		3
History/Philosophy/Religious Studies course at 2000-level <sup>1</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>128</b>

<sup>1</sup> Must take two different disciplines