

# The Wesley J. Howe School of Technology Management - II

## UNDERGRADUATE PROGRAM

Business success in the 21st century is increasingly dependent on the strategic development and utilization of technology. This is a complex challenge since the solutions to many business problems rely on the convergence of a number of technologies and their proper alignment with customer requirements and various other business elements.

To meet this challenge, The Wesley J. Howe School of Technology Management at Stevens has designed a unique undergraduate program, specifically designed to teach students both business and technology in an integrated fashion. The Business and Technology program combines a traditional business curriculum with the most recent elements of technology to satisfy the growing corporate demand for professionals who are effective as liaisons between business and technology units. The innovative "corporate-defined" curriculum of this bachelor's degree program has a strong, broad base of computer science, science, economics, finance, marketing and mathematics, plus a business plan spine.

Since this is a lock-step program, all courses for the business program need to be taken in the proper sequence. In addition, it is anticipated that students participate in an internship, ideally at the same company during each of the summers between their academic years. These internships typically form the basis for their final business plan, required for BT 402.

Business and Technology 4-Year Course Schedule:

### Freshman Year

		Term I		
		Hrs. Per Wk.		
		Class	Lab	Sem. Cred.
BT 101	Introduction to Business Planning	3	0	3
BT 131	Introduction to Innovation and Creativity	3	0	3
Ma 117	Calculus for Business and Liberal Arts	3	0	3
Mgt 111	Social Psychology and Organizational Behavior	3	0	3
Mgt 244	Microeconomics	3	0	3
CS 105	Intro. to Scientific Computing	2	2	3
	OR			
CS 115	Introduction to Computer Science	3	2	4
PE 200	Phys. Ed. I	0	2	1
	<b>TOTAL</b>	<b>17(18)</b>	<b>4</b>	<b>19(20)</b>

		Term II		
		Hrs. Per Wk.		
		Class	Lab	Sem. Cred.
BT 102	Diagnosing Internal Capabilities of a Company	3	0	3
BT 113	Marketing	3	0	3
Ma 118	Probability for Business and Liberal Arts	3	0	3
BT 121	IT and Applications: Intro. to e-Technology	3	0	3
BT 115	Financial Accounting	4	0	4
PE 200	Phys Ed. II	0	2	1

<b>TOTAL</b>		<b>16</b>	<b>2</b>	<b>17</b>
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**Sophomore Year**

Term III				
		Hrs. Per Wk.		
		Class	Lab	Sem.
		Cred.		
BT 201	Diagnosing and Measuring Customer Satisfaction	3	0	3
PEP 111	Mechanics	3	0	3
BT 221	Statistics	3	0	3
BT 215	Cost Accounting	3	0	3
Hu 1XX	History/Social Science (B)	3	0	3
PE 200	Phys Ed. III	0	2	1
<b>TOTAL</b>		<b>15</b>	<b>2</b>	<b>16</b>

Term IV				
		Hrs. Per Wk.		
		Class	Lab	Sem.
		Cred.		
BT 202	Diagnosing the External Environment	3	0	3
BT 224	Science & Technology: Electricity, Magnetism and Optics	3	0	3
BT 223	Applied Models and Simulations	3	0	3
BT 214	Market Research	3	0	3
Mgt 243	Macroeconomics	3	0	3
Hu 1XX	History/Social Science (B)	3	0	3
PE 200	Phys. Ed. IV	0	2	1
<b>TOTAL</b>		<b>18</b>	<b>2</b>	<b>19</b>

**Junior Year**

Term V				
		Hrs. Per Wk.		
		Class	Lab	Sem.
		Cred.		
BT 301	Goal Setting and Sales / Revenue Plan Development	3	0	3
BT 334	Science and Technology: Introduction to Chemistry and Materials	3	0	3
BT 321	Corporate Finance	3	0	3
Mgt 401	MIS/DBMS/Networks*	3	0	3
EM 450	Operations Management	3	0	3
Hu 1XX	Literature/Philosophy (A)	3	0	3
PE 200	Phys. Ed. V	0	2	1
<b>TOTAL</b>		<b>18</b>	<b>2</b>	<b>19</b>

\* Students may substitute BT421 for Mgt 401

Term VI				
		Hrs. Per Wk.		
		Class	Lab	Sem.
		Cred.		
BT 302	Preparing the Planning Document	3	0	3
BT 352	Managing Innovation and Technology	2	0	2
Ch 281	Biology and Biotechnology	3	0	3
Ch 282	Intro. Biology Lab	0	3	1
Hu 1XX	Literature/Philosophy (A)	3	0	3
	FREE ELECTIVE	3	0	3
PE 200	Phys. Ed. VI	0	2	1
<b>TOTAL</b>		<b>14</b>	<b>5</b>	<b>16</b>

**Senior Year**

Term VII				
		Hrs. Per Wk.		
		Class	Lab	Sem.
		Cred.		
BT 401	Implementation, Controlling and Capital Acquisition	3	0	3
BT 411	Business Consulting or Engineering Management Design I	0	6	2

BT 414*	Technology Infrastructure	3	0	3
BT 413	Business Law, Ethics and Negotiations	3	0	3
BT 403	Marketing Strategy and Decision Making - Elective	3	0	3
	FREE ELECTIVE	3	0	3
	<b>TOTAL</b>	<b>15</b>	<b>6</b>	<b>17</b>

#### Term VIII

		Hrs. Per Wk.		
		Class	Lab	Sem. Cred.
BT 402	Plan Perfection and Presentation	3	0	3
BT 412	Business Consulting or Engineering Management Design II	0	6	2
BT 415	Entrepreneurship	3	0	3
Hu 3XX/4XX	Humanities Elective	3	0	3
BT XXX	Business Elective	3	0	3
	FREE ELECTIVE	3	0	3
	<b>TOTAL</b>	<b>15</b>	<b>6</b>	<b>17</b>

\* Students may substitute BT 421 for BT 414.

#### **Economics Minor – Advisor: Prof. C. Timothy Koeller**

Students enrolled in any undergraduate major at Stevens may qualify for a minor in economics by taking the seven courses indicated below. In addition, students must achieve a GPA of at least 2.6 in the seven minor courses, with no individual course grade lower than a 'C'.

#### **Business and Technology Students:**

##### **Required:**

BT 215 (or equivalent, e.g., EM301) Cost Accounting  
 BT 321 Corporate Finance  
 Mgt 243 Macroeconomics  
 Mgt 244 Microeconomics  
 Hum 107 Studies in History/Social Science: Modernization

##### ***Plus one course from among the following:***

HHS 123 History of European Society and Culture I  
 HHS 124 History of European Society and Culture II  
 HHS 125 U.S. Social and Economic History I  
 HHS 126 U.S. Social and Economic History II

##### ***Electives: One course from among the following:***

HSS 379 International Politics  
 HSS 377 Cities and the Global Economy  
 HSS 380 Energy, Politics, and Administration  
 HSS 389 The Economic History of Europe  
 HHS 479 Studies in the History of Technology  
 HHS 414 Industrial America  
 HHS 390 History of Credit, Money, and Banking  
 HHS 312 Technology and Society in America

#### **Engineering/Science Students:**

**Required:**

E 355 Engineering Economy  
Mgt 243 Macroeconomics  
Mgt 244 Microeconomics  
Hum 107 Studies in History/Social Science: Modernization

***Plus one course from among the following:***

HHS 123 History of European Society and Culture I  
HHS 124 History of European Society and Culture II  
HHS 125 U.S. Social and Economic History I  
HHS 126 U.S. Social and Economic History II

***Electives: Two courses from among the following:***

TG 401 Entrepreneurship and Business for Engineers and Scientists  
EM 301 Engineering Cost Estimation  
HSS 379 International Politics  
HSS 377 Cities and the Global Economy  
HSS 380 Energy, Politics, and Administration  
HSS 389 The Economic History of Europe  
HHS 479 Studies in the History of Technology  
HHS 414 Industrial America  
HHS 390 History of Credit, Money, and Banking  
HHS 312 Technology and Society in America

**Click to find course descriptions for required courses offered from these departments:**

- [Business and Technology and Management \(BT and MGT\)](#)
- [Chemistry and Chemical Biology \(Ch\)](#)
- [Computer Science \(CS\)](#)
- [Engineering Management \(EM\)](#)
- [Mathematics \(Ma\)](#)
- [Physics \(PEP\)](#)

**Internship/Electives**

Seniors may elect to do an internship at their curriculum partner company for 2.5 days a week for the entire semester. A company manager and a Stevens faculty member will supervise them. The internships culminate in written and oral reports delivered to representatives from the companies, Stevens faculty and other students in the class. Projects are selected by the company and approved by Stevens faculty. Intern projects must contain some significant creativity or development component. Credit for approved internships is variable.

Alternatively, during the senior year students may select up to three electives (9 credits) within a chosen area of interest and write a proposal to conduct an independent study that leads to a senior thesis. The student must convince a faculty member of the importance of the subject and convince that faculty member to act as a thesis advisor.

Areas of consideration might include Biomedical Products and Technology, Entrepreneurship, E-business, Technology Marketing, Financial Services, Information and Network Systems, etc.

