

**Note:**

**This document on programmes offered by the Department of Information Systems is for polytechnic diploma holders admitted and matriculated in AY2005-6.**

(last update on 14 June 2006)

**Bachelor of Computing (E-Commerce)**

**Objective**

The 4-year E-Commerce programme focuses on the deployment of Internet technology to enhance the business capabilities of organisations and businesses.

EC graduates will be educated with (a) a deep understanding and command of the theory and practice of internet technology, (b) a broad understanding of business, and (c) a thorough understanding of the deployment of IT to create business opportunities.

EC graduates will be able to develop and plan e-commerce systems, either as part of traditional organisations, or as part of new internet companies.

EC graduates will be especially well prepared for e-commerce careers, such as e-commerce developer, e-commerce analyst and consultant. With e-commerce happening in every industry, graduates will have a wide selection of employment. With their excellent multidisciplinary education, graduates can choose from more technically oriented careers to more business-oriented careers. Besides e-commerce careers, graduates will also be in excellent positions to contribute in more traditional IT careers.

**University Scholars Programme (E-Commerce)**

Students in the University Scholars Programme who choose the Bachelor of Computing (E-Commerce) major will take the E-Commerce programme, but with the following variations:

1. They will not be required to take the following:
  - (a) The University Level Requirements (28 MCs)
  - (b) Principles of Economics (EC1301) (4 MCs)(These are replaced by the appropriate First-Tier Scholars Modules.)
2. They will be required to take 3 (instead of 4) modules from the School of Business.
3. They will have 17 (instead of 29) MCs under "Unrestricted Electives".

**Table 1: Summary of degree requirement for B.Comp. (E-Commerce)**

<b>Modules</b>	<b>Modular Credits</b>	<b>Subtotals</b>
<b>UNIVERSITY LEVEL REQUIREMENTS</b>		<b>28</b>
<b>PROGRAMME REQUIREMENTS</b>		<b>103</b>
<b><i>Common Essentials</i></b>		
CS1101/S Programming Methodology	5	
CS1102/S Data Structures and Algorithms	5	
CS1104 Computer Organisation	4	
CS1105 Computing and Society	4	
CS2102 Database Systems	4	
CS2103 Software Engineering	4	
CS2105 Computer Networks I <sup>1</sup>	4	
<b><i>Major Requirements</i></b>		
EC1301 Principles of Economics	4	
School of Business modules (choose 4 modules) <sup>2</sup>	16	
CS2301 Business and Technical Communication	4	
CS2250 Fundamentals of Information Systems	4	
CS3235 Introduction to Computer Security	4	
CS3266 E-Commerce Technologies	5	
CS3240 Human-Computer Interaction CS3254 Information Security Management CS3255 Information Organisation CS3261 IT Marketing <sup>3</sup> CS3265 Economics of E-Business	8 (Choose 2 modules)	
CS4260 E-Commerce Business Models	4	
CS4264 E-Commerce B2C Applications	4	
CS4245 Multimedia E-Learning Environment CS4250 IS Research Methodologies CS4251 Strategic IS Planning CS4252 Control, Audit and Security of IS CS4253 Information Systems Consulting CS4254 IS Project Management CS4255 IT Outsourcing and Offshoring Management CS4265 Advanced Topics in E-Commerce CS4266 IT and Customer Relationship Management	8 (Choose 2 modules)	
CS4101 Honours Project	12	
CS4102 Technical and Management Training	0	
<b>UNRESTRICTED ELECTIVES</b>		<b>29</b>
<b>Grand Total</b>		<b>160</b>

<sup>1</sup> CS2105 has been renamed to CS2105 Introduction to Computer Networks starting Semester 1, 2006-7.

<sup>2</sup> The list of Business modules offered by the School of Business is available at <http://www.comp.nus.edu.sg/~csit/ISEC/bizmod.html>

<sup>3</sup> The prerequisites and preclusions to CS3261 have been revised. Please check NUS Bulletin Online for the latest information.

## **Bachelor of Computing (Information Systems)**

### **Objective**

The 4-year IS programme will provide a multi-disciplinary education on information systems, combining the disciplines of computer science and management. The programme focuses on the application and management of information technology to enhance the effectiveness of organisations and businesses. It also analyses the impact and trends of technology and the relevant implications for the economy and society.

IS graduates will be able to develop and manage business information systems, with an excellent understanding of the required technology and the organisational environment.

IS graduates will meet the market demand for MIS specialists, management consultants, and technology analysts. Possible employers include end-users, system integrators, consultancies, market research firms, regulatory agencies and investment advisors.

### **University Scholars Programme (Information Systems)**

Students in the University Scholars Programme who choose the Bachelor of Computing (Information Systems) major will take the Information Systems programme, but with the following variations:

1. They will not be required to take the following:
  - (a) The University Level Requirements (28 MCs)
  - (b) Principles of Economics (EC1301) (4 MCs)(These are replaced by appropriate First-Tier Scholars Modules.)
2. They will be required to take 2 (instead of 3) modules from the 3000-level module group (CS3250, CS3251, CS3254, CS3255, CS3260, CS3264). [Namely, 4 MCs fewer]
3. They will be required to take 3 (instead of 4) modules from the 4000-level module group (CS4245, CS4250, CS4251, CS4252, CS4253, CS4254, CS4255, CS4265, CS4266). [Namely, 4 MCs fewer]
4. Eight MCs (out of 48 MCs for USP) will count towards "Unrestricted Electives".

**Table 2: Summary of degree requirement for B.Comp. (Information Systems)**

<b>Modules</b>	<b>Modular Credits</b>	<b>Subtotals</b>
<b>UNIVERSITY LEVEL REQUIREMENTS</b>		<b>28</b>
<b>PROGRAMME REQUIREMENTS</b>		<b>110</b>
<i><b>Common Essentials</b></i>		
CS1101/S Programming Methodology	5	
CS1102/S Data Structures and Algorithms	5	
CS1104 Computer Organisation	4	
CS1105 Computing and Society	4	
CS2102 Database Systems	4	
CS2103 Software Engineering	4	
CS2105 Computer Networks I <sup>4</sup>	4	
<i><b>Major Requirements</b></i>		
EC1301 Principles of Economics	4	
One accounting module (e.g. FNA1002)	4	
ST2334 Probability and Statistics	4	
CS1231 Discrete Structures	4	
CS2106 Operating Systems	4	
CS2301 Business and Technical Communication	4	
CS2250 Fundamentals of Information Systems	4	
CS3253 Management of IS	4	
CS3214 Information Systems Development Project	8	
CS3250 Management Support Systems CS3251 Technology Strategy and Management CS3254 Information Security Management CS3255 Information Organisation CS3260 Telecommunications for Business CS3264 Enterprise Resource Planning Systems	12 (Choose 3 modules)	
CS4245 Multimedia E-Learning Environment CS4250 IS Research Methodologies CS4251 Strategic IS Planning CS4252 Control, Audit and Security of IS CS4253 Information Systems Consulting CS4254 IS Project Management CS4255 IT Outsourcing and Offshoring Management CS4265 Advanced Topics in E-Commerce CS4266 IT and Customer Relationship Management	16 (Choose 4 modules)	
CS4101 Honours Project	12	
CS4102 Technical and Management Training	0	
<b>UNRESTRICTED ELECTIVES</b>		<b>22</b>
<b>Grand Total</b>		<b>160</b>

<sup>4</sup> CS2105 has been renamed to CS2105 Introduction to Computer Networks starting Semester 1, 2006-7.