



Office of the Secretary of the University
and of the Board of Regents

File
Leyte State University
Visca, Baybay, Leyte 6521 A
Philippines

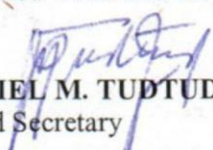
EXCERPTS OF APPROVED MINUTES OF THE
3rd LSU Board of Regents Meeting
08 February 2002 * LNU, Tacloban City

Proposal to Offer B.S. Computer Science

Board Resolution No. 17, s. 2002

Approving the proposal to Offer B.S. Computer Science as
proposed.

Certified True and Correct:


DANIEL M. TUdTUD JR.
Board Secretary

cc: OVPAA
University Registrar
CIMDO
Dr. G.J. Galinato, Dean, College of Engineering & Agri-Industries
Prof. Ma. L.E. Diputado, Head, Dept. of Computer Science & Tech.



LEYTE STATE UNIVERSITY
Visca, Baybay, Leyte 6521 A
Philippines

Office of the Board Secretary

08 February 2002

**The Honorable Chairman and
Members of the LSU Board of Regents**

Ladies/Gentlemen:

I am hereby endorsing the "**Proposal to Offer B.S. Computer Science**" which was prepared by the Department of Computer Science and Technology, College of Engineering and Agri-Industries. This proposal was presented to and approved by the University Academic Council during its 29 January 2002 meeting. The University Academic Council has endorsed the proposal for approval by the Board of Regents.

I am, therefore, recommending the same **FOR APPROVAL** by the Board of Regents.

Very truly yours,

PACIENCIA P. MILAN
President

BOARD ACTION : _____

DATE : 08 February 2002

PROPOSAL TO OFFER

BACHELOR OF SCIENCE IN COMPUTER SCIENCE (BSCS)

I. RATIONALE

Computers are now used widely in all areas of modern life. It has changed the way we live, learn, work, and play. With the boom in computer use, more information is kept, accessed, and maintained in the computers. According to the U.S. President's Information Technology Advisory Committee (PITAC), information technology will be one of the key factors driving progress in the 21st Century. Advances in computing and communications technology will create a new infrastructure for business, scientific research, and social interaction. This expanding infrastructure will provide us with new tools for communicating throughout the world and for acquiring knowledge and insight from information. And to be informed citizens in this information age, we need to learn the technology and understand the theories behind it.

For almost two decades now, the computing industry has continuously provided an attractive employment market for a wide range of computer-trained personnel. Today, due to the rapid evolution of solid state electronics, hardware costs are substantially decreased and hardware advancements have opened up a completely new range of applications. And as computer applications expand, systems analysts, computer scientists, and database administrators are projected to be among the fastest growing occupations [Occupational Outlook Handbook, published in the Internet by U.S. Department of Labor]. This trend will be the same even for a third world country like ours, because as prices of hardware and software continue to fall, more businesses will expand computerized operations and integrate new technologies. Our high school students see these opportunities. This is evidenced from the results of the survey conducted by the Department of Agricultural Engineering and Applied Mathematics in the second week of January 2002. Of the surveyed 410 senior high school students from the nearby secondary schools 128 or 31.22 % opted for B.S. Computer Science while 50 (12.2%) opted for B.S. Information Technology as their first choices for the college degree to pursue (Appendix II). That is why most colleges and universities who want to keep pace with the needs of the times are offering courses in computing and other computer-related degree programs.

In this light, the degree of Bachelor of Science in Computer Science (BSCS) is being proposed to be offered as a degree program at the Leyte State University. The program is designed for students who want to study computing in depth. It focuses on the software, the hardware and the underlying theory of computing, as well as its applications to scientific and technical problem solving, and to information processing in commerce and industry.

The program aims to produce graduates who are highly competent to work as software practitioners in the different areas of computing and who can also do effective teaching, research and extension services in the field of computer science. Graduates will also be prepared to do advanced studies in Computer Science.

II. GRADUATE PROFILE

A. COGNITIVE

1. Acquire knowledge on the concepts and principles of computing, including the architectural structure and machine-level operations of computers to be able to understand the efficient interface between software and hardware.
2. Develop the creativity in producing software to be able to help the industry and to improve production and efficiency in the private and government sectors and thus push our country towards economic recovery and development.

3. Acquire techniques and better understanding of problem solving in conducting systems projects.

B. AFFECTIVE

1. Cultivate positive attitude toward problem-solving and any analytical process;
2. Acquire values of integrity and persistence necessary in undertaking systems projects;
3. Appreciate the principles and technology of computing;
4. Utilize wisely and with responsibility all computer resources available in any organization.

C. PSYCHOMOTOR

1. Equip graduates with the necessary skills and techniques in systems development and maintenance;
2. Provide graduates with the mathematical tools that are needed in developing and implementing algorithms to come up with better solutions to problems.
3. Provide graduates with the basic technical skills in assessing existing technology and software.

III. TARGET CLIENTELE

1. High school graduates; and
2. Technicians and other career professionals who need formal computer education as may be required by their agencies.

IV. EMPLOYMENT OPPORTUNITIES

1. Career in the computing industry (Systems Analyst, Computer Programmer, Information Technology Officer, Web Analyst/Programmer, Database Administrator, Software Engineer);
2. Teachers of Computer Science and Mathematics;
3. Researchers in research institutions; and
4. IT entrepreneur (software house, computer shop, Internet café, etc.).

1 V. CURRICULUM

2

3 A. COURSE SCHEDULE

Course No. and Descriptive Title			HOURS		Units	Prerequisite
			Lec	Lab		
FIRST YEAR, 1st semester			7			
CS 21	Introduction to Computers		2	3	3	1,500
Chem 11	General Chemistry I		3	3	4	
Engl 11	Communication Skills I		3		3	
Math 11	College Algebra		3		3	1,400
Psyc 11	General Psychology		3		3	
SocSci 13	Socio-Economic Systems		3		3	
PhyEd 11	Physical Fitness and Gymnastics		2		(2)	
Euth 11/	Personality Dev. & Adjustments/	NTSP	1		(1/1.5)	180.00
ROTC 11	First Year Basic Course				3 units	
Total Units					19	
FIRST YEAR, 2nd semester						
CS 22	Foundation of Computer Science		2	3	3	CS 21
Bio 11	General Biology		3	3	4	
Engl 12	Communications Skills II		3		3	
Math 12	Plane Trigonometry		3		3	Math 11
Philo 12	Contemporary Philosophical Thoughts		3		3	
Socio 11	General Sociology		3		3	
PhyEd 12	Recreation Games & Rhythmic Act		2		(2)	
Euth 12/	Human Relations/		1		(1/1.5)	
ROTC 12	First Year Basic Course					
Total Units					19	
SECOND YEAR, 1st semester						
Math 125	Mathematical Analysis I		5		5	Math 12
CS 101	Discrete Mathematics for CS		3		3	Math 11, CS 22
CS 103	Computer Programming		2	3	3	CS 22
Hum 11	Introduction to Humanities		3		3	
Phys 11	General Physics		3	3	4	Math 12
Spch 11	Speech Communications		3		3	
PhyEd 13	Team Sports		2		(2)	
Euth 13/	Moral and Spiritual Values/		1		(1/1.5)	
ROTC 21	Second Year Basic Course					
Total Units					21	
SECOND YEAR, 2nd semester						
Math 126	Mathematical Analysis II		5		5	Math 125
CS 112	Data Structures		3		3	CS 101
CS 122	Logic Circuit Design		2	3	3	CS 101
Stat 21	Elementary Statistics		2	3	3	Math 11
Phys 21	College Physics		2	3	3	Physics 11
SocSci 15	Phil. History and Constitution		3		3	
PhyEd 14	Individual-Dual Sports		2		(2)	
Euth 14/	Career Development/		1		(1/1.5)	
ROTC 22	Second Year Basic Course					
Total Units					20	

4

Course No. and Descriptive Title			HOURS		Units	Prerequisite
			Lec	Lab		
THIRD YEAR, 1st semester						
Engl	21	Introduction to Literature	3		3	
Fil	25	Sining ng Pakikipagtalastasan	3		3	
Math	131	Linear Algebra	3		3	Math 125
CS	113	File Processing and Database Systems	2	3	3	CS112
CS	123	Introduction to Computer Organization and Assembly Programming	2	3	3	CS 103, CS 122
CS	133	Object-oriented Programming	2	3	3	CS103,CS112
CS	135	Visual Programming	2	3	3	CS 103
Total Units					21	
THIRD YEAR, 2nd semester						
Fil	26	Panitikan ng Filipino	3		3	
SocSci	14	Phil.Soc. Prob. Land Reform & Taxation	3		3	
CS	124	Computer Architecture	3		3	CS 123
CS	136	Structure of Programming Languages	2	3	3	CS103,CS112
CS	138	Software Engineering	2	3	3	CS103,CS112
CS	139	Operating Systems	2	3	3	CS 123
Stat	136	Experimental Designs	2	3	3	Stat 21
Total Units					21	
FOURTH YEAR, 1st semester						
SocSci	16	Life and Works of Rizal	3		3	
CS	142	Statistical Packages	2	3	3	Stat136
CS	143	Web Programming	2	3	3	CS 103
CS	145	Principles of Compiler Design	2	3	3	CS 136
CS	147	Automata and Languages Theory	3		3	CS 112
CS	198	Research Planning and Manuscript Preparation	3		3	Engl 12
CS	200	Undergraduate Thesis			2	
Total Units					19	
FOURTH YEAR, 2nd semester						
CS	144	Data Communications and Networking	2	3	3	CS 139
CS	148	Design and Analysis of Algorithms	3		3	CS 112
CS	192	Computer Ethics and Technical Manual Preparation	3		3	
CS	199	Undergraduate Seminar	1		1	CS 198
CS	200	Undergraduate Thesis			4	
Total Units					14	

B. COURSE ANALYSIS

1. General Education

Course	Description	No. of Units
<u>Language and Humanities</u>		
English 11	Communication Skills I	3
English 12	Communication Skills II	3
Speech 11	Speech Communication	3
Filipino 25	Sining at Pakikipagtalastasan	3
Filipino 26	Panitikang Filipino	3
Hum 11	Introduction to Humanities	3
Philo 12	Contemporary Philosophical Thoughts	3
English 21	Introduction to Literature	3

Sub-total 24

Mathematics and Natural Sciences

Math 11	College Algebra	3
Math 12	Plane Trigonometry	3
Phys 11	General Physics	4
Bio 11	General Biology	4
Chem 11	General Chemistry	4

Sub-total 18

Social Sciences

Psyc 11	General Psychology	3
Socio 11	General Sociology	3
Soc Sci 13	Socio-Economic System	3
Soc Sci 14	Phil. Soc. Prob. Land Reform & Taxation	3

Sub-total 12

Mandated Courses

Soc Sci 15	Phil. History and Constitution	3
Soc Sci 16	Life and Works of Rizal	3

Sub-total 6

2. Fundamental Courses

Physics, Statistics and Computer Science

Course	Description	No. of Units
Phys 21	College Physics	3
Stat 21	Elementary Statistics	3
CS 21	Introduction to Computers	3 ✓
CS 22	Foundation of Computer Science	3 ✓

Sub-total 12

3. Required Mathematics and Statistics Courses

Course	Description	No. of Units
Math 125	Mathematical Analysis I	5
Math 126	Mathematical Analysis II	5
Math 131	Matrix Algebra	3
Stat 136	Experimental Designs	3

Sub-total		16

4. Major Courses

Course	Description	No. of Units
CS 101 [✓]	Discrete Mathematics for Computer Science	3 [✓]
CS 103 [✓]	Computer Programming	3
CS 112 [✓]	Data Structures	3
CS 113 [✓]	File Processing and Database Systems	3
CS 122 [✓]	Logic Circuit Design	3
CS 123 [✓]	Introduction to Computer Organization and Assembly Programming	3
CS 124 [✓]	Computer Architecture	3
CS 133 [✓]	Object-oriented Programming	3
CS 135 [✓]	Visual Programming	3
CS 136 [✓]	Structure of Programming Languages	3
CS 138 [✓]	Software Engineering	3
CS 139 [✓]	Operating Systems	3
CS 142 [✓]	Statistical Packages	3
CS 143 [✓]	Web Programming	3
CS 144 [✓]	Data Communications and Networking	3
CS 145 [✓]	Principles of Compiler Design	3
CS 147 [✓]	Automata and Languages Theory	3
CS 148 [✓]	Design and Analysis of Algorithms	3
CS 192 [✓]	Computer Ethics and Technical Manual Preparation	3
CS 198 [✓]	Research Planning and Manuscript Preparation	3
CS 199 [✓]	Undergraduate Seminar	1
CS 200 [✓]	Undergraduate Thesis	6

Sub-total		67

Grand Total 155

VI. COURSES TO BE CHANGED AND INSTITUTED

A. Course to be Changed

1. Change in Course Title, Description and Prerequisite

From :

Course No : CS 21

Course Title : Introduction to Computer Science

Description : Development of computers, components of a computer system, microcomputer operation: word processing, electronic spreadsheets, electronic presentation.

Prerequisite : Math 11

Credit : 3 units

5 hours a week, 2 lec, 3 lab

To :

Course No : CS21

Course Title : Introduction to Computers

Description : Development of computers, components of a computer system, microcomputer operation: word processing, electronic spreadsheets, electronic presentation; the internet.

Prerequisite : None

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : The previous title does not really reflect the content of the course. The course introduces the students to the practical applications of the computer and not to the science of computing. Also, the course needs only a background in arithmetic rather than algebraic operations. Hence, Math 11 is no longer required as prerequisite. Furthermore, the internet is added as an additional topic to widen the students' skills in computer operations.

B. Core Courses to be Instituted

1. Course No. : CS 22

Course Title : Foundation of Computer Science

Description : Introduction to the major areas of computer science, number systems, computer theory, computer organization and architecture, problem-solving techniques, fundamentals of logic formulation and introduction to computer programming.

Prerequisite : CS 21 (Introduction to Computers)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : Introductory knowledge on how computers work and how computers can be used to solve problems are presented in this course. It provides the foundation from which higher subjects will be learned and based on.

2. Course No. : CS 101

Course Title: Discrete Mathematics for Computer Science

Description : Principles of logic, elementary set theory, functions and relations, counting techniques, Boolean and abstract algebra, principles of combinatorics and probability.

Prerequisite : Math 11 (College Algebra)

CS 22 (Foundation of Computer Science)

Credit : 3 units

3 hours a week lec

Rationale : This course introduces the fundamental tools, topics, and concepts of discrete mathematics needed to study computer science. This course emphasizes counting methods, proof techniques and problem-solving strategies.

3. Course No. : CS 103

Course Title: Computer Programming

Description : Systematic program development: coding, testing and debugging of programs; elements of a programming language: assignment statement, program control structures, data structures, files, subprograms.

Prerequisite : CS 22 (Foundation of Computer Science)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : The topic on computer programming introduced in CS 22 is continued in this course. All the principles and elements of programming are discussed using a specific programming language.

4. Course No. : CS 112

Course Title: Data Structures

Description : Abstract data types and implementations of data structures: arrays, stacks, queues, linked lists, mappings, trees, sets and graphs; searching and sorting techniques, dynamic storage management.

Prerequisite : CS 101 (Discrete Mathematics for Computer Science)

Credit : 3 units

3 hours a week lec

Rationale : The course introduces the concepts of abstract data types of common data structures used in problem solving. The relation between the running of an algorithm and the choice of data structures is also studied in this course.

5. Course No. : CS 113

Course Title: File Processing and Database Systems

Description : Data Models: relational, network and hierarchical models; database management systems, data definition and manipulation language; data security, integrity, synchronization, protection and recovery; principal database systems and query languages.

Prerequisite: CS 112 (Data Structures)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : This course provides the students with the basic concepts of databases, including data modeling, relational databases, query languages, dependencies, schema design, and concurrency control. The students will be exposed to one or several commercial database systems.

- 1 6. Course No. : CS 122
2 Course Title: Logic Circuit Design
3 Description : Data representation and computer arithmetic, logic functions
4 and equations; description, analysis and design of
5 combinatorial and sequential circuits; functional properties of
6 digital integrated circuits.
7 Prerequisite: CS 101 (Discrete Mathematics for Computer Science)
8 Credit : 3 units
9 5 hours a week, 2 lec, 3 lab
10 Rationale : The course introduces the students to digital hardware design.
11 Combinatorial and sequential circuits are discussed to make the
12 students understand how data are stored and processed by a
13 digital computer.
14
- 15 7. Course No. : CS 123
16 Course Title: Introduction to Computer Organization and Assembly
17 Programming
18 Description : Introduction to computer organization, hardware-software
19 interface and interrupt mechanism; machine vs assembly vs
20 high-level programming, data structure representations,
21 program control implementations, subroutines and parameter
22 passing, recursion, direct-video graphics, serial port
23 communications.
24 Prerequisites: CS 103 (Computer Programming)
25 CS 122 (Logic Circuit Design)
26 Credit : 3 units
27 5 hours a week, 2 lec, 3 lab
28 Rationale : The course introduces the students to the machine-level
29 operations of computers for them to understand the relationship
30 between the user programs and the hardware components of a
31 computer system, that is, based on the knowledge and
32 understanding of addressing modes, instruction functions and
33 execution speed.
34
- 35 8. Course No. : CS 124
36 Course Title: Computer Architecture
37 Description : Multiprocessing, pipelining, array and associative processors,
38 microprogramming, memory bandwidths, modularization,
39 interleaving, access path, cache, associative and virtual
40 memories, bus structures, interrupt handling, RISC and CISC
41 computers.
42 Prerequisite: CS 123 (Introduction to Computer Organization and
43 Assembly Programming)
44 Credit : 3 units
45 3 hours a week lec
46 Rationale : This course introduces the students to some advanced topics in
47 computer organization. It covers the design of complex
48 computer systems making heavy use of the components and
49 techniques discussed in CS 123.
50
- 51 9. Course No. : CS 133
52 Course Title: Object-oriented Programming Languages and Systems
53 Description : Concepts of object-oriented programming (OOP): fundamental
54 abstraction, modularity, encapsulation and hierarchy; object-
55 oriented analysis and design, object-oriented languages and
56 systems.
57 Prerequisites: CS 103 (Computer Programming)
58 CS 112 (Data Structures)
59 Credit : 3 units

5 hours a week, 2 lec, 3 lab
Rationale : This course introduces to the students the fundamental concepts, methodology, and applications of object-oriented programming as well as the languages that have the object-oriented facility and exposes them to object-oriented systems.

10. Course No. : CS 135

Course Title: Visual Programming

Description : Concepts of event driven programming; program design and flow; control arrays, procedures, functions and forms; working with files and graphics, interacting with user and system, debugging a Visual application, ActiveX Data Objects (ADO) and database access from Visual applications.

Prerequisite: CS 103 (Computer Programming)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : The course exposes the students to another type of applications development - Visual programming. In this course, the students will learn the fundamentals of visual language theory, iconic and symbolic representations, semantics and pragmatics of visual languages, visual programming systems, visual querying systems and visual information systems.

11. Course No. : CS 136

Course Title: Structure of Programming Languages

Description : Theory and implementation of high-level programming languages; syntax and translation language definition structures; elementary and structured data types, abstraction mechanisms, sequence and data control, run time considerations.

Prerequisites: CS 103 (Computer Programming)

CS 112 (Data Structures)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : The course is a comparative study of different high-level languages, their constructs, data structures, control and iteration, and their implementation. This will give the students an opportunity to examine and implement different programming languages.

12. Course No. : CS 138

Course Title: Software Engineering

Description : Software development process; requirement analysis, specification, design, abstraction, programming style, testing, maintenance and software project management.

Prerequisites: CS 103 (Computer Programming)

CS 112 (Data Structures)

Credit : 3 units

5 hours a week, 2 lec, 3 lab

Rationale : In this course, the students will learn and gain practical experience with software engineering principles and techniques. The practical experience is centered on a semester-long team project in which a software development process is carried through all the stages of the software life cycle. Particular emphasis is placed on designing and developing maintainable software.

- 1
2 13. Course No. : CS 139
3 Course Title: Operating Systems
4 Description : Processor management, memory management, file and disk
5 management, resource management, networks and distributed
6 systems.
7 Prerequisite: CS 123 (Introduction to Computer Organization and
8 Assembly Programming)
9 Credit : 3 units
10 5 hours a week, 2 lec, 3 lab
11 Rationale : This course is a study of the design and analysis of operating
12 systems. This will provide the students with an understanding
13 of how the convenient and efficient interface between user
14 programs and hardware, including the sharing of resources and
15 the provision of common services to different programs, are
16 performed by an operating system.
17
18 14. Course No. : CS 143
19 Course Title: Web Programming
20 Description : Client/Server development concepts as applied to the WWW;
21 tools used to create WWW applications; global networking
22 with the Internet, HTML, VBScript and JavaScript, ActiveX
23 Controls, CGI Programs, Microsoft SQL Server, Structured
24 Query Language, Client/Server Design
25 Prerequisite: CS 103 (Computer Programming)
26 Credit : 3 units
27 5 hours a week, 2 lec, 3 lab
28 Rationale : The course will provide the students with the basic
29 programming skills on languages that are needed to develop
30 and implement Web-based applications.
31
32 15. Course No. : CS 144
33 Course Title: Principles of Data Communications and Networking
34 Description : Circuit and packet switching; network principles, architectures
35 and protocols; local/metropolitan/wide area networks; OSI
36 protocols; TCP/IP suite; ISDN; network management and
37 network programming.
38 Prerequisite: CS 139 (Operating Systems)
39 Credit : 3 units
40 5 hours a week, 2 lec, 3 lab
41 Rationale : This course introduces the students to the fundamentals of data
42 communication and computer networking including the
43 architecture, design, terminal handling, virtual circuits and
44 protocols.
45
46 16. Course No. : CS 145
47 Course Title: Principles of Compiler Design
48 Description : Fundamental concepts in the design and implementation of
49 compilers; lexical analysis, syntax analysis, code generation
50 and optimization.
51 Prerequisite: CS 136 (Structure of Programming Languages)
52 Credit : 3 units
53 5 hours a week, 2 lec, 3 lab
54 Rationale : The course provides the students with the knowledge of
55 compiler designs and implementations, and the basic parsing
56 techniques. This will help students understand how compilers
57 check syntax and translate source codes into object codes.

- 1
2 17. Course No. : CS 147
3 Course Title: Automata and Languages Theory
4 Description : Finite automata and regular languages; push-down automata
5 and context-free languages; Turing machines and recursively
6 enumerable sets; linear-bounded automata; computability and
7 the halting problem; undecidable problems; recursive functions
8 and computational complexity.
9 Prerequisite: CS 112 (Data Structures)
10 Credit : 3 units
11 5 hours a week, 2 lec, 3 lab
12 Rationale : The course introduces the various models of computation, the
13 relative strengths and weaknesses of these models, with
14 particular attention to uncomputability results; computational
15 complexity as a natural outcome of restrictions to these models.
16
17 18. Course No. : CS 148
18 Course Title: Design and Analysis of Algorithms
19 Description : Algorithm design techniques: use of data structures, divide and
20 conquer, dynamic programming, greedy techniques, local and
21 global search. Complexity analysis of algorithms: asymptotic
22 analysis, worst case and average case, recurrences, lower
23 bounds, NP-completeness.
24 Prerequisite: CS 112 (Data Structures)
25 Credit : 3 units
26 5 hours a week, 2 lec, 3 lab
27 Rationale : This will provide students with the knowledge of fundamental
28 algorithms, strategies for designing algorithms and
29 mathematical tools for analyzing algorithms. The course
30 emphasizes on non-numerical algorithms such as sorting,
31 searching, pattern matching, and graph and network
32 algorithms.
33
34 20. Course No. : CS 192
35 Course Title : Computer Ethics and Technical Manual Preparation
36 Description : Professional ethics, computer crimes, intellectual property
37 rights, software reliability, Filipino value system, technical
38 writing techniques for systems documentation, specifications
39 and proposals.
40 Pre-requisite: Senior Standing
41 Credit : 3 units
42 3 hrs a week lec
43
44 Rationale : The course deals with the ethical considerations, and analysis
45 and preparation of different types of written communication as
46 it applies to the Information and Communications Technology
47 (ICT) industry. The students will be made aware of the code of
48 conduct in the field of ICT and the basic concepts and
49 usefulness of the Filipino value system. Furthermore, it will
50 provide students with the skills and techniques in writing
51 technical materials pertaining to systems projects.
52
53 21. Course No. : CS 198
54 Course Title: Research Planning and Manuscript Preparation
55 Description : Principles of scientific writing; selecting a research problem;
56 preparing an outline; writing a manuscript.
57 Prerequisite: Engl 12
58 3 hours a week lecture
59 Credit : 3 units

- 1 Rationale : This course will help develop in the students the required skills
2 in planning and conducting a research study, and in writing the
3 results of their study.
4
5 22. Course No. : CS 199
6 Course Title: Undergraduate Seminar
7 Description : Basic organization for oral presentations; using visual aids in
8 oral presentations.
9 Prerequisite : CS 198
10 Credit : 1 unit
11 Rationale : This course will teach the students how to prepare for an oral
12 presentation and will provide them with the skills and
13 techniques in presenting a research study.
14
15 23. Course No. : CS 200
16 Course Title: Undergraduate Thesis
17 Description : Research Work in Computer Science
18 Pre-requisite: Senior Standing
19 Credit : 6 units
20 Rationale : This course will allow the students to apply the concepts
21 learned to do a simple computing research work. This is a good
22 preparation for future employment on the area of research,
23 systems development, or for further studies.

VII. EXISTING STAFF

	Degree	School	Courses to handle
A. Core Staff			
1. Ma. Luisa E. Diputado	MS Comp.Sci.	UP Los Baños	CS 22, CS 101, CS 103, CS 113, CS 138, CS 139, CS 147, CS 148, CS 199, CS 200
2. Preston E. Racho	BS Comp. Eng'g. (15 units leading to MEng'g)	Cebu Inst. of Technology	CS 21, CS 122, CS 123, CS 124, CS 144
3. Winston M. Tabada	PhD Comp.Sci. (candidate)	DeLaSalle U.	CS112, CS 113, CS 133, CS 135, CS 136, CS 138, CS 143, CS 192, CS 198, CS 199, CS 200
B. Affiliate Staff			
1. Alexis G. Bertulfo	BS Comp. Eng'g.	Univ. of Cebu	CS 122, CS 123, CS 124
2. Epifania G. Tudit	M.Ed. Math (6 units leading to MSCS)	ViSCA	CS 21
3. Sean O. Villagonzalo	BS ECE	Cebu Inst. of Technology	CS 122, CS 144
4. Remberto A. Patindol	PhD Statistics	UP Los Baños	Stat 21, Stat 136, CS 142

1 **VIII. EXISTING FACILITIES**

2
3 **A. Rooms**

- 4
5 1 Lecture Room
6 1 Laboratory Room
7

8 **B. Laboratory Facilities and Equipment**
9

Item Type	Description	Quantity
Servers	Pentium III – 600 w/ 8 Gb hard disk (clone)	1
	Pentium III – 800 w/ 20 Gb hard disk (clone)	1
Workstations	ACER, Pentium 133 w/ 1.2 Gb hard disk	11
	DataMini, Pentium 200 w/ 2 Gb	1
	Celeron 400 with 4 Gb hard disk (clone)	6
	ACER, Pentium 200 w/ 2Gb hard disk	1
Printers	EPSON LQ-2180	1
	EPSON LQ-2070	1
	CANON BJC-620	1
	LEXMARK Optra R+	1
UPS	APC Back-UPS 500	4
	Pulsar ESV8	6
Scanner	Vuego Scan 300F	1
Television set	JVC 36"	1
TV-Coder	Umax	1
LAN Cards	PCI Ethernet DECchip	11
	10/100 PCI Ethernet	1
	3Com Fast EtherLink XL 10/100Mb	1
Air Conditioner	National , 2hp	2
Hub	24 port, Catalyst 1900	1
Tape Drive	HP SureStore Tape 5000	1

10
11
12
13
14

APPENDIX I

NUMBERING SCHEME FOR COMPUTER SCIENCE COURSES

CRITERIA

A. Existing

Level of Courses

- 1 - 19 General Education
- 20 - 29 Fundamental
- 100 - 199 Major

B. Additional Criteria based on "horizontal" disciplines

- 100 - 109 Discrete Mathematics and Computer Programming
- 111 - 119 Data Structures and Database Concepts
- 121 - 129 Hardware Concepts
- 131 - 139 Applications Programming and Operating System
- 141 - 149 Network Programming, Compiler Design and Theory
- 192 Computer Ethics and Technical Manual Preparation
- 198 Research Planning and Manuscript Preparation
- 199 Undergraduate Seminar
- 200 Undergraduate Thesis

APPENDIX II

Table 1. College degree programs chosen by 4th year high school respondents according to sex and priority of choices.

B.S. DEGREE	MALE		FEMALE		TOTAL / PERCENTAGE			
	1ST Choice	2nd Choice	1ST Choice	2nd Choice	1ST Choice	%	2nd Choice	%
1. Computer Science	21	21	107	47	128	31.22	68	16.75
2. Information Tech.	21	24	29	41	50	12.20	65	16.01
3. Math	4	3	7	2	11	2.68	5	1.23
4. Computer Engineering	27	19	10	16	37	9.02	35	8.62
5. ECE	30	16	7	12	37	9.02	28	6.90
6. Ag. Eng'g.	4	5	4	3	8	1.95	8	1.97
7. Civil Engineering	10	21	6	6	16	3.90	27	6.65
8. Food Technology	4	5	12	16	16	3.90	21	5.17
9. Economics	3	3	5	5	8	1.95	8	1.97
10. Ag. Econ.	2	5	1	6	3	0.73	11	2.71
11. Business Administration	5	6	7	14	12	2.93	20	4.93
12. Business Management	2	8	38	65	40	9.76	73	17.98
13. Agri-Business	6	11	16	17	22	5.37	28	6.90
14. Others	3	2	19	7	22	5.37	9	2.22
TOTAL	142	149	268	257	410	100.00	406	100.00

School surveyed: LSU LHS, BNHS, Damulaan NHS, Bunga NHS, Makinhas NHS

Date surveyed: January 2002