# Veer Narmad South Gujarat University

## Department of ICT

## B.Sc.IT , Semester 2

## Credits: 02

## Paper No: 201

## Business Communication Skills in English (AEC)

**Objectives:**

- To produce skilled and industry ready professionals for better placements and preparing them for the real world .
- To make the students aware about business, corporate and IT related professional Communication.
- Make the students proficient &enable them to meet the requirements of communication at the office .

**Outcomes:**

Students will be ready for the real world.
Students will be aware about the Scenario in Corporate world.
Students will be able to communicate well in IT Organization.

**Unit 1. Understanding Business and Professional Communication :(Theory)**

- Professional Communication- Meaning and Need
- Features of successful Professional communication
- Purpose of Professional communication
- The Role and Purpose of Business Communication

**Unit 2: Understanding Specific Communication Needs (Theory)**

- Corporate communication
- Persuasive strategies in Business communication
- Ethics in Business communication
- Business Etiquette and Netiquette

**Unit 3: Business Writing**

- Business writing

- Business conversations
- Writing for a website

**Unit 4: Business Vocabulary :**

- Business Idioms
- Expressions :

Resume, Interview, Meetings,Group discussion, Client conversations, Presentations

**Unit 5 :LSRW Skills in Business Communication :**

- Business Greetings
- Talking about Software, Website, IT Companies, New Trends in IT,
- Business terms with correct Pronunciations
- Tasks based on LSRW Skills:

**Reference Books:**


1. Business Communication –Connecting in a Digital world, Mc.Graw Hill, Raymond V. Lesikar
2. Business Communication,Oxford University Press,Carolyn Meyer & N. Bringi Dev
3. Intercultural Business Communication,Oxford University Press, Robert Gibson
4. Business Communication: Connecting at Work,Oxford University Press,Hory Sankar Mukerjee
5. Communication Skills for Professionals ,Prentice Hall India Learning Private Limited; 2nd edition (2011),Konar N.
6. The New Rules of Business ,Penguin Random House ,Srivastava , Rajesh,2019.
7. Business Communication,Harvard Business Review Press,
8. Professional Communication,Oxford,Meenakshi Raman,Sangeeta Sharma.2017
9. Business Communication (2nd Edition) Meenakshi Raman,Prakash Singh.2019.
10. Successful Presentations for professionals who use English at work. Oxford University Press, Video Course.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.**
**SYLLABUS FOR M.Sc. (I.T.) (UG)**
**SEMESTER-2**
**Course : 202 : Mathematics-2**
**Effective from June- 2021**
**(4 Hours/Week, Credits : 4)** O.L. Change

Minimum weeks per semester: 15 (Including class work, examination, preparation, holidays etc)

Purpose of course : Students will be able to explain and apply the basic methods of mathematics.

Course objective : To develop logical sequence in the design and analysis of algorithm, computability theory, software engineering and computer systems.

Pre-requisite : Basics of Mathematics

Course Outcome : Students will be equipped with logic to develop design and analysis of algorithm, computability theory, software engineering and computer systems.

Teaching Methodology : Lectures, Discussion, Independent Study, Seminars and Assignments.

Evaluation Method : 30% Internal assessment and 70% External assessment.

Course Content :

Unit 1: Basic concept of Graph Theory :

1.1 What is graph?
1.2 Application of Graphs
1.3 Directed graph
1.4 Finite and Infinite graphs
1.5 Incidence and Degree
1.6 Isolated vertex, Pendent vertex and Null graph
1.7 Simple graph
1.8 Regular graph

Unit 2 : Paths and Circuits :

2.2 Isomorphism
2.2 Sub graphs
2.3 A puzzle with Multicolored cubes
2.4 Walks, Paths and Circuits
2.5 Connected graphs, disconnected graphs and Components, Decomposition
2.6 Euler graphs, Universal graph
2.7 Operations on graphs –Union, Intersection, Ring sum
2.8 Complete graph
2.9 Hamiltonian paths and Circuits
2.10 Seating arrangement problems
2.11 The travelling Salesman problem

Unit 3 : Trees and Fundamental Circuits :

3.1 Trees
3.2 Some properties of trees

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3.3 Pendent Vertices in a tree
3.4 Distance and Centers in a tree
3.5 Rooted and Binary trees
3.6 On counting trees
3.7 Spanning trees
3.7.1 Finding all Spanning trees of graph
3.8 Fundamental circuits
3.9 Spanning tree in a Weighted graph

Unit 4 : Planar graphs :

4.1 Combinatorial vs Geometric graphs
4.2 Planar graphs
4.3 Non–Planar graphs
4.3 Kuratowski's $K_{3,3}$ and $K_5$ graphs.
4.4 Different representation of planar graph

Unit 5 : Matrix representation of graphs :

5.1 Incidence matrix
5.2 Sub matrices of A(G)
5.4 Path matrix
5.5 Adjacency matrix.

Reference Books :


1. Narsinh Deo : Graph Theory with applications to engineering and computer Science, Prentice – Hall Inc. (2005).
2. B. Satyanarayan, K.S. Prasad : Discrete Mathematics & Graph Theory, PHI (2009).
3. R.Manohar, Trembly J.P.: Discrete Mathematical structure with application to Computer Science, TMH, 1999.
4. Wilson R.J.: Introduction to Graph Theory, 3rd edition, Longmann, 1984.
5. Gibbons A.: Algorithmic Graph Theory, Cambridge University Press, 1984.
6. Harry F.: Graph Theory, Narosa Publication, 1995.
7. Richard J.: Discrete Mathematics, Pearson Educations, Asia, 2001.

## B.Sc. (I.T.) / M.Sc. (I.T.) 2nd Semester

Course : 203 : Fundamentals of Programming using C - II

<table>
<tr><td>Course Code</td><td>203</td></tr>
<tr><td>Course Title</td><td>Fundamentals of Programming using C - II</td></tr>
<tr><td>Credit</td><td>4</td></tr>
<tr><td>Teaching per Week</td><td>4 Hrs</td></tr>
<tr><td>Minimum weeks per Semester</td><td>15 (Including Class work, examination, preparation, holidays etc.)</td></tr>
<tr><td>Last Review / Revision</td><td>June 2023</td></tr>
<tr><td>Purpose of Course</td><td>To teach advanced concepts of C language</td></tr>
<tr><td>Course Objective</td><td>To impart knowledge of structures, union, pointers, user defined functions, pre-processor directives and file management features of C language.</td></tr>
<tr><td>Course Outcomes</td><td>CO1 : Students will be able to learn advanced concepts of c programming like pointer , structure, union, etc.<br><br>CO2 : Students will be able to have the knowledge of file system and file management concepts with c language<br><br>CO3 : Students will be have ability to work on pre-processor</td></tr>
<tr><td>Mapping between COs with PSOs</td><td><table><tr><td></td><td>PSO1</td><td>PSO2</td><td>PSO3</td><td>PSO4</td><td>PSO5</td></tr><tr><td>CO1</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CO2</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>CO3</td><td></td><td></td><td></td><td></td><td></td></tr></table></td></tr>
<tr><td>Pre-requisite</td><td>Basic knowledge of problem solving and C programming.</td></tr>
<tr><td>Course Outcome</td><td>Students will be able to write programs using structures, union, pointers, user defined functions, pre-processor directives and file management in C language.</td></tr>
<tr><td>Course Content</td><td>Unit : 1 : Structure and Union<br>1.1 Structure<br>1.1.1 Declaring and Defining Structure elements<br>1.1.2 Structure Initialization<br>1.1.3 Structure assignment<br>1.1.4 Array of Structure, Array within a structure<br>1.1.5 Nested Structure<br>1.1.6 Size of Structure<br>1.2 Union<br><br>Unit : 2 : User Defined Functions<br>2.1 Introduction<br>2.2 Declaration and Definition<br>2.3 Methods of parameter passing<br>2.4 Scope of variables and storage classes<br>2.5 Recursion<br>2.6 Passing array to functions<br>2.7 Passing Structure, union to function<br><br>Unit : 3 : Pointer<br>3.1 Pointer Basics<br>3.2 Pointers and arrays<br>3.3 Chain of pointers</td></tr>
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P. M Desai

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| | 3.4 Pointer and character strings<br>3.5 Array of pointers, pointer to array<br>3.6 Pointer and functions<br>3.6.1 Call by value & call by reference<br>3.6.2 Passing array to a function using pointer<br>3.7 Pointer to structures<br>3.8 Issues with pointers<br>3.9 Dynamic memory allocation<br>3.9.1 Allocating a memory block<br>3.9.2 Allocating multiple blocks of memory<br>3.9.3 Altering the size of a block<br>3.9.4 Releasing used Space<br><br>**Unit : 4 : File Management in C**<br>4.1 Introduction: Definition, File structure, concept of Record<br>4.2 File access modes: Sequential, random, binary,<br>4.3 File Operations<br>4.2.1 Creating a new file<br>4.2.2 Opening a file<br>4.2.3 Reading from a file<br>4.2.4 Writing to a file<br>4.2.5 Moving to a specific location in a file (Seek)<br>4.2.6 Closing a file<br>4.4 Error handling during I/O operations<br>4.5 Command Line Arguments<br><br>**Unit : 5 : The Pre-processor**<br>5.1 Features of C Preprocessor<br>5.2 Macro<br>5.3.1 Macro Expansion<br>5.3.2 Macro with arguments<br>5.3.3 Nested Macro<br>5.3 File Inclusion<br>5.4 Conditional compilation<br>5.5 Compiler Control Directives |
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| Reference Book | 1 Programming in ANSI C : E. Balagurusamy - Tata McGraw Hill<br>2 Let us C : Yashwant Kanetkar - BPB Publications<br>3 Pointers in C : Yashwant Kanetkar - BPB<br>4 The complete Reference C : Herbert Schildt - McGrawHill<br>5 Programming with C : R S Bichkar - Universities Press<br>6 C Programming Language : Karnighan & Ritchie - TMH<br>7 Mastering Turbo C : Stan Kelly - BPB |
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| Teaching Methodology | Discussion, Independent Study, Seminars and Assignment |

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## B.Sc. (I.T.) / M.Sc. (I.T.) 2nd Semester

Course : 204 : Introduction to DBMS

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|---|---|
| Course Code | 204 |
| Course Title | Introduction to DBMS |
| Credit | 4 |
| Teaching per Week | 4 Hrs |
| Minimum weeks per Semester | 15 (Including Class work, examination, preparation, holidays etc.) |
| Last Review / Revision | June 2023 |
| Purpose of Course | To introduce the basic concepts of database management system that includes data models, database design and basic practical of open-source DBMS. |
| Course Objective | To teach fundamental concepts of DBMS including data models, ER diagrams, different types of databases. This course also entails practical aspects of open-source database. |
| Course Out comes | CO1 : Student will be able to learn basic concept of database management system and data models<br><br>CO2 : Students will be have the knowledge of various data models<br><br>CO3 : Student will be able work on database management system MySQL and perform practical like creating database , tables and manipulating records |
| Mapping between COs with PSOs | |

| | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| CO1 | | | | | |
| CO2 | | | | | |
| CO3 | | | | | |

| | |
|---|---|
| Pre-requisite | Fundamentals of Computer, Programming Language |
| Course Outcome | Students will be able to understand and implement basic database design principles, learn overview of different types of databases. Students will also be able to perform practical on database. |
| Course Content | **Unit : 1 : Basic Concepts of DBMS**<br>1.1 File Organization and Traditional File based System<br>1.2 Database and Need for DBMS<br>1.3 Characteristics of DBMS<br>1.4 Applications of DBMS<br>1.5 Views of Data - Schema and instances<br>1.6 Data Independence<br>1.7 Database Languages<br>1.8 Transaction Management<br>1.9 ACID Properties of Transaction<br>1.10 Database Administrator and Database Users<br>1.11 Overall System Architecture |

**Unit : 2 : Data Models**

2.1 Data Models
- 2.1.1 Network Model
- 2.1.2 Hierarchical Model
- 2.1.3 Relational Model
- 2.1.4 Object Model
- 2.1.5 Object-Relational Model

2.2 Entity Relationship Model
- 2.2.1 DB Design using ER Model
- 2.2.2 Entities
- 2.2.3 Relationships
- 2.2.4 Attributes
- 2.2.5 Entities and Relationship Set
- 2.2.6 Constraints and Design Issues
- 2.2.7 Weak Entity Set
- 2.2.8 Cardinality Ratio

**Unit : 3 : Types of Databases and Recent Trends in DBMS**

3.1 Types of Databases
- 3.1.1 Object Oriented Database
- 3.1.2 Centralized Database
- 3.1.3 Distributed Database
- 3.1.4 Parallel Database
- 3.1.5 Multimedia Database
- 3.1.6 NoSQL Database
- 3.1.7 Temporal Database
- 3.1.8 XML Database

3.2 Recent Trends in DBMS
- 3.2.1 Overview of Various Databases - MySQL, PostgreSQL, SQLite, MongoDB, MariaDB, Oracle, DB2and SQL Server

3.3 Big Data

**Unit: 4 : Introduction to Open Source Database - MySQL**

4.1 Getting Started with MySQL
4.2 Installing MySQL
4.3 Data Types
4.4 Creating and Using Database
4.5 DDL Statements
- 4.5.1 Create Table
  - 4.5.1.1 Constraints
  - 4.5.1.2 Primary Key and Foreign Key Constraint
- 4.5.2 Alter Table
- 4.5.3 Delete Table

**Unit : 5 : DML Statements and Other Functions of MySQL**

5.1 DML Statements
- 5.1.1 Insert Statement
- 5.1.2 SQL
- 5.1.3 Select Statement
- 5.1.4 Update Statement
- 5.1.5 Delete Statement

5.2 Aggregate Functions

P.M Desai

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|---|---|
| | 5.3 Numerical Functions<br>5.4 String and Character Functions |
| Reference Book | 1. Database System Concepts : Silberschatz, Korth and Sudarshan - McGraw Hill<br>2. An introduction to database systems : C. J. Date - Addison Welsley<br>3. Fundamentals of Database Systems : Elamsri, Navathe, Somayajulu and Gupta - Pearson Education<br>4. PHP and MySQL Web Development (Developer's Library) : Luke Welling - Addison - Wesley Professional<br>5. The Compete Reference MySQL : Vikram Vaswani - McGraw Hill<br>6. Murach's MySQL : Joel Murach - Mike Murach & Associates, Inc. |
| | |
| Teaching Methodology | Lectures, Discussion, Independent Study, Seminars, Case Study and Assignment |

P. M Desai

## B.Sc. (I.T.) / M.Sc. (I.T.) 2nd Semester

Course : 205 : Practical 2

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|---|---|
| Course Code | 205 |
| Course Title | Practical 2 |
| Credit | 4 |
| Teaching Per Week | 8 Hrs |
| Minimum Weeks Per Semester | 15 (Including Practical Work, Examination, Preparation, Holidays etc.) |
| Last Review/Revision | June 2023 |
| Purpose of Course | To impart practical knowledge of structures, union, pointers, user defined functions, preprocessor directives, file management, etc. features of programming & basic database management concepts. |
| Course Objective | To give practical knowledge of structures, union, pointers, user defined functions, preprocessor directives, file management, etc. using C language. & database creation, management, basic database queries using MySQL. |
| Prerequisite | Basic knowledge of C language and Programming Concepts |
| Course Out comes | CO1 : Students will be able to solve problems using advanced features of C language.<br><br>CO2 : Students will be able to solve complex problems using pointers in C language.<br><br>CO3 : Students will be able to do database management operations using MySQL |
| Mapping between COs with PSOs | |
| Course Outcome | Students will be able to solve problems using advanced features of C language & design MySQL database(s) along with data manipulation concepts of DBMS. |
| Course Content | Practical based on Paper No. 203 - Fundamentals of Programming using C-II & Paper No. 204 – Introduction to DBMS.<br>Weightage: 70% based on Paper No 203<br>30% based on Paper No 204 |
| Reference Books | NIL |
| Teaching Methodology | Lab Work |

| | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| CO1 | | | | | |
| CO2 | | | | | |
| CO3 | | | | | |

Re-Accredited 'B++' 2.86 CGPA by NAAC
VEER NARMAD SOUTH GUJARAT UNIVERSITY
University Campus, Udhna-Magdalla Road, SURAT - 395 007, Gujarat, India.
વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી
યુનિવર્સિટી કેમ્પસ, ઉધના-મગદલ્લા રોડ, સુરત - ૩૯૫ ૦૦૭, ગુજરાત, ભારત.
Tel : +91 - 261 - 2227141 to 2227146, Toll Free : 1800 2333 011, Digital Helpline No.- 0261 2388888
E-mail : info@vnsgu.ac.in, Website : www.vnsgu.ac.in

એમ.એસસી (આઈ.ટી) પ્રોગ્રામ/
તા. ૨૫/૪/૨૦૨૩.

OIC

પ્રતિ,
કુલસચિવશ્રી
વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી
સુરત.

**ધ્યાન :– એકેડેમિક વિભાગ**

**સંદર્ભ :– ક્રમાંક : એકે/પરિપત્ર/૧૫૭૧૫/૨૦૨૧, તા. ૧૨/૧૦/૨૦૨૧.**

મહાશય,

સવિનય ઉપરોકત સંદર્ભ અન્વયેનાં પત્ર અન્વયે જણાવવાનું કે વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટીનાં ડીપાર્ટમેન્ટ ઓફ આઈ.સી.ટી. ખાતે શૈક્ષણિક વર્ષ ૨૦૨૩ થી Environmnetal Studies નામનો value added course અને Introduction to Linux નામનો Skill Enhancement Course ચાલુ કરવા અંગે યોગ્ય ઘટતું થવા વિનંતી છે. આ સાથે સદર કોર્ષ અંગેની માહિતી મોકલવામાં આવે છે. જે આપશ્રીની જાણ માટે.

ડૉ. પુષ્પલ દેસાઈ
હેડ
ડીપાર્ટમેન્ટ ઓફ આઈ.સી.ટી.

Proposal Date: 1/05/2023

**Form – CC-01**

**(Certification Course Proposal Form)**

Title of Certification Course: DISASTER MANAGEMENT AND PREPAREDNESS (VAC)

Name of Institution: DEPT. OF ICT, VNSGIU

Faculty Name: FACULTY OF IT

Name of Course-In-Charge: DR. DILBER MEHTA

Course Credit for Proposed Course: 02

Total Course Hours : 30 (VAC)

| | |
|---|---|
| Objective of the Course: | TO MAKE THE STUDENTS AWARE ABOUT DISASTER AND ITS MANAGEMENT |
| Pre-requisite: | BASIC KNOWLEDGE OF ENVIRONMENT |
| Expected Outcomes of the Course: | STUDENTS LEARN TO DEAL WITH DISASTERS AND HAVE THE PREPAREDNESS TO FACE IT AND HELP THE SOCIETY |
| Course Nature : (Theory / Practical / Field based or Blended) | BLENDED |
| Eligibility Criteria of Participants: | HSC PASS |
| Total Maximum Seats allotted for the Course: | 264 |
| Course Syllabus ( In Detail): | ENCLOSURE I |
| Proposed Fees Per Credit | NIL |
| Exam Pattern: (MCQ / Written / Practical / Blended | MCQ |

P. Y Desai 2/5/23

HEAD
Department of I.C.T.
Veer Narmad South Gujarat University
SURAT.

( Name and signature by Authorized official of the Institution with seal)

[For Office Use] :

Application Received Date: _____ Approved By: _____

Course Code allotted : _____ Approval Date: _____

Signature by the University Official : _____

**Department of Information and Communication Technology,**

**Veer Narmad South Gujarat University,**

**Surat**

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**Syllabus for Value Added**

**Certificate Course in Disaster Management &Preparedness**

**Course Credit: 2**

**Total Contact Hours: 30**

**Subject: Disaster Management and Preparedness**

**Value added course**

**Credits :2**

**No. of Lectures: 30**

**Unit 1: Introduction to Disaster:**

- **Concepts and Definitions**
- Disaster
- Hazard
- Risk
- Vulnerability
- Resilience

**Unit 2: Disasters:Classification,Causes, Impacts**

- **Natural Disaster:**
- Earthquake
- Tsunami
- Landslides
- Volcanic Eruptions
- Flood
- Droughts
- Health
- Tornadoes
- Epidemics
- **Man-Made Disasters:**
- Socio-technical Disasters
- Technological Disaster
- Transportation Disaster
- Structural Collapse
- Wars

**Unit 3: Approaches to Disaster Risk Reduction:**

- Disaster Management Cycle
- Phases of Disaster cycle

- Culture of safety,prevention, mitigation and preparedness
- Community based disaster risk reduction
- Structural and Non -structural Measures
- Responsibilities of Community
- Responsibility of Dtate,Centre and other stake holders

**Unit 4: Inter-relationship between Disasters and Development:**

- Factors Affecting Vulnerabilities
- Different Impacts
- Impact of Developmental Projects

**Unit 5: Disaster Risk Management in India and Case Studies:**

- **Hazards and Vulnerability Profile of India**
- Components of Disaster Relief
- Existing Institutional Framework
- Four Phases of Disaster Management
- **Case Studies:**
- Earthquake at Bhuj (Gujarat),2001
- Tsunami,2004

**Reference Books:**

1.Disaster Management Guidelines, GOI-UND Disaster Risk Program (2009-2012)

2. Damon, P. Copola, (2006) Introduction to International Disaster Management, Butterworth Heineman.

3. Gupta A.K., Niar S.S and Chatterjee S. (2013) Disaster management and Risk Reduction, Role of Environmental Knowledge, Narosa Publishing House, Delhi.

4. Murthy D.B.N. (2012) Disaster Management, Deep and Deep Publication PVT. Ltd. New Delhi.

5. Modh S. (2010) Managing Natural Disasters, Mac Millan publishers India LTD.

6. Dhavan,Gauba Nidhi and Khan Sardar Ambrina. Disaster Management and Preparedness, CBS Publishers and Distributors.

Proposal Date: 1/05/2023

**Form – CC-01**

**(Certification Course Proposal Form)**

Title of Certification Course: ENVIRONMENTAL STUDIES (VAC)

Name of Institution: DEPARTMENT OF ICT

Faculty Name: INFORMATION TECHNOLOGY

Name of Course-In-Charge: DR. DILBER MEHTA

Course Credit for Proposed Course: 02

Total Course Hours : 30

| | |
|---|---|
| Objective of the Course: | TO CREATE AWARENESS ABOUT ENV |
| Pre-requisite: | BASIC KNOWLEDGE ABOUT ENV |
| Expected Outcomes of the Course: | STUDENTS DEVELOP SENSITIVITY TOWARDS ENV<br>STUDENTS LEARN TO PRESERVE & NURTURE ENV<br>AWARENESS ABOUT ENV & ITS VALUES IS CREATED |
| Course Nature : (Theory / Practical / Field based or Blended) | BLENDED |
| Eligibility Criteria of Participants: | 12th PASS |
| Total Maximum Seats allotted for the Course: | 260 |
| Course Syllabus ( In Detail): | ENCLOSURE ATTACHED |
| Proposed Fees per Credit | NIL |
| Exam Pattern: (MCQ / Written / Practical / Blended | MCQ |

P. Y. Desai 5/2/23

HEAD
Department of ICT
Veer Narmad South Gujarat University
SURAT.

( Name, Signature by Authorized official with official seal)

[For Office Use] :

Application Received Date: _____ Approved By: _____

Course Code allotted : _____ Approval Date: _____

Signature by the University Official : _____

**Department of Information and Communication Technology,**

**Veer Narmad South Gujarat University,**

**Surat**

**Syllabus for Value Added**

**Certificate Course in Environmental Studies**

**Course Credit: 2**

**Total Contact Hours: 30**

**Subject: Environmental Studies**

**Value added course**

**Credits :2**

**No. of Lectures: 30**

**Unit1**

**Introduction to Environmental Studies:**

- Need for Public Awareness
- Ministry of Environment and Forest and climate change
- Scope and Importance
- Population growth and our resources
- Environmental footprint
- Importance of Management of the environment

**Unit 2**

**Concept of Sustainability and Sustainable development:**

- New Dimensions for Mainstreaming Sustainable Development into college Curricula
- The Need for sustainable Lifestyles
- Equitable use of resources for sustainable lifestyle
- Environmental education and education for sustainable development – the different perspectives
- The need for gender equality

**Unit 3**

**Environmental Pollution &Climate Change:**

- Causes of pollution and preventive measures
- Effects of pollution
- Control of pollution
- Types of pollution:
- Air pollution
- Water pollution
- Soil Pollution
- Chemical pollution
- Noise pollution
- **Climate change :**
- Global warming, Ozone Layer Depletion and impacts on human communities and agriculture

**Unit 4**

**Human Health and Diseases Today:**

- **Mental Problems:** Stress, Anxiety , Depression- Causes and Preventive Measures
- Food Habits and Lifestyle

**Diseases:**

- Cancer : Causes and Preventive Measures
- Covid-19 : Causes and Preventive Measures
- Aids: Causes and Preventive Measures

**Unit 5**

**Disaster Management and Risk Reduction:**

- Disaster and Its types
- Disaster Management
- Disaster Risk Reduction and Preventive Measures

**Suggested Reading:**


1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.
4. Gadgil, M. & Ramachandra, G. 1993. This fissured land: an ecological history of India. Univ of California Press.
5. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
6. Grumbine, R. Edward, and Pandit, M.K. Threats from India's Himalaya dams. Science 339.6115 (2013): 36-37.
7. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
8. McCully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.
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Proposal Date: _____

## Form – CC-01

## (Certification Course Proposal Form)

**Title of Certification Course:** Internet and Web Technology

**Name of Institution:** Department of Information and Communication Technology, Veer Narmad South Gujarat University, Surat

**Faculty Name:-** _____

**Name of Course-In-Charge:** Dr. Payal Joshi

**Course Credit for Proposed Course:** 3

**Total Course Hours :** 30

**Type of Course : (AEC/SEC/VAC)** SEC

**(AEC = Ability Enhancement Course / SEC = Skill Enhancement Course / VAC = Value Added Course)**

| | |
|---|---|
| **Objective of the Course:** | To make the students aware of Internet and website designing using HTML, CSS and CSS Framework |
| **Pre-requisite:** | NIL |
| **Expected Outcomes of the Course:** | CO1 : Students will be able to get knowledge of internet technologies and services<br>CO2 : Students will be able to learn HTML structure and various tags<br>CO3 : Students will get an ability to design and develop web application , and also do animation with CSS and JavaScript |
| **Course Nature : (Theory / Practical / Field based or Blended)** | Theory |
| **Duration of the Course/Program: ( In weeks and Hours)** | 30 Hrs. |
| **Eligibility Criteria of Participants:** | 12th Pass |
| **Total Maximum Seats allotted for the Course:** | 264 |
| **Proposed Fees per Credit** | NIL |
| **Course/Program Syllabus ( In Detail) (Attach Enclosure)** | Enclosure-1 |
| **Evaluation Pattern: (MCQ / Written / Practical / Blended** | 50 marks written and 50 marks practical examination |

P. M. Desai
2/5/23

HEAD
Department of I.C.T.
Veer Narmad South Gujarat University
SURAT.

( Name and signature of the Authorized official with official seal)

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**[For Office Use] :**

**Application Received Date:** _____ **Approved By:** _____

**Course Code allotted :** _____ **Approval Date:** _____

**Signature by the University Official :** _____

Enclosure-1

**Department of Information and Communication Technology,**

**Veer Narmad South Gujarat University,**

**Surat**

# Syllabus for Skill Based
# Certificate Course in Internet and Web Technology

**Course Credit: 3**

**Total Contact Hours: 30**

**Certificate Course Name: Internet and Web Technology**

**[Skill Enhancement Course]**

**Course Credit: 3**

**Total Contact Hours: 30**

**Unit 1 Introduction to Internet:**

- History of Internet
- Working of Internet
- Internet Applications
- Advantages of Internet
- WWW
- Uniform Resource Locator
- W3C Standards
- Web Pages
- Web Server
- Web Browsers
- Domain Name Service
- Applications of Internet
- Internet Service Providers
- DSL, Broadband and ISDN
- Dedicated Connections
- Wireless Connections
- IP Addresses - IPv4 and IPv6
- DHCP
- Static IP and Dynamic IP

**Unit 2 HTML:**

- Structure
- Open Source HTML Editors
- Links
- Images and ImageMaps
- Tables
- Forms
- Frames

**Unit 3 Advanced HTML:**

- Semantic Elements and Non-Semantic Elements
- HTML5 Elements
- HTML5 Input Types and Attributes
- Graphics - Canvas and SVG
- Media - audio, embed, source, track and video

**Unit 4 Advanced Cascading Style Sheet (CSS):**

- Style Sheet Types
  - Linked
  - Embedded
  - Inline
- Style Sheet Precedence
- Style Sheet Syntax
- Using Classes
- Font Control
- Text Control
- Color and Background
- List Box Control
- Miscellaneous Properties
  - Margin and Padding Properties
  - Border Properties
  - Tables
- Multi-Column Layouts
- Gradients
- Drop Shadows
- 2D Transforms
  - Translate
  - Rotate
  - Scale
  - Skew
- 3D Transforms
- Transitions
- Animations
- Paged Media
- Using Ready made Templates
- Bootstrap framework
  - Introduction to Responsive Design, Using Bootstrap in a Web page
  - Typography, Color management, Jumbotron, Images, Alerts,Buttons
  - Tables,Forms, Drop downs, Navigation bar, Grid Basics, Pagination
  - Testing responsiveness using Browser Developer Tools

**Unit 5 Web Designing Fundamentals:**

- Role and Tasks of a Web Designer
- Characteristics of User Friendly Websites with Improved UI/UX
- Basic Search Engine Optimization (SEO) Techniques
- Case Study

Proposal Date: _____

## Form – CC-01

## (Certification Course Proposal Form)

**Title of Certification Course:** E Business and Cyber Laws

**Name of Institution:** Department of Information and Communication Technology, Veer Narmad South Gujarat University, Surat

**Faculty Name:-** _____

**Name of Course-In-Charge:** Dr. Devendra Pandey

**Course Credit for Proposed Course:** 3

**Total Course Hours :** 30

**Type of Course : (AEC/SEC/VAC)** SEC

**(AEC = Ability Enhancement Course / SEC = Skill Enhancement Course / VAC = Value Added Course)**

| | |
|---|---|
| **Objective of the Course:** | To Impart fundamental Knowledge of E Business and Cyber Laws |
| **Pre-requisite:** | NIL |
| **Expected Outcomes of the Course:** | CO1 : Students will be able learn about E-commerce business models and strategy<br>CO2 : Student will get knowledge about identify the key security threats in the E-commerce environment.<br>CO3 : Student will learn various type of cyber security techniques and cyber laws |
| **Course Nature : (Theory / Practical / Field based or Blended)** | Theory |
| **Duration of the Course/Program: ( In weeks and Hours)** | 30 Hrs. |
| **Eligibiiity Criteria of Participants:** | 12th Pass |
| **Total Maximum Seats allotted for the Course:** | 264 |
| **Proposed Fees per Credit** | NIL |
| **Course/Program Syllabus ( In Detail) (Attach Enclosure)** | Enclosure-I |
| **Evaluation Pattern: (MCQ / Written / Practical / Blended** | 50 marks MCQs |

P. V. Desai 2/5/23

HEAD
Department of I.C.T.
Veer Narmad South Gujarat University
SURAT.

**( Name and signature by Authorized official of the Institution with official seal)**

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**[For Office Use] :**

**Application Received Date:** _____ **Approved By:** _____

**Course Code allotted :** _____ **Approval Date:** _____

**Signature by the University Official :** _____

Enclosure-1

**Department of Information and Communication Technology,**

**Veer Narmad South Gujarat University,**

**Surat**

# Syllabus for Skill Based
# Certificate Course in E Business and Cyber Laws

**Course Credit: 3**

**Total Contact Hours: 30**

**Certificate Course Name: E Business and Cyber Laws**

**[Skill Enhancement Course]**

**Credit: 3**

**Total Contact Hours: 30**

**Unit 1 E-Commerce:**

- E Business
- E Business Models
- The Technologies and Infrastructural requirements of E-Commerce
- Advantages and Disadvantages of E-Commerce
- International issues of Electronic Commerce
- Types of business transactions (B2B), (B2C), (B2G),Business Processes
- Digital India Services, DigiLocker and other tools

**Unit 2 Introduction to E Payments:**

- Digital payments requirements
- Digital Token based E payment systems
- Classification of new payment system
- E Wallet
- Online Internet Banking
- Unified payment Interface – BHIM and other tools
- Online financial services in India

**Unit 3 Cryptocurrency, Bitcoin and Blockchain:**

- Introduction to Crytocurrency
- How Cryptocurrency Works , Ewallet Services and Personal Cryptosecurity
- Introduction to Bitcoin , Merchants acceptance of Bitcoin
- How Bitcoin Works overview, Transaction ,Blocks , Mining
- Blockchain – Technology Stack :Protocol, Currency
- Financial Services
- Crowd Funding
- Bitcoin Prediction Markets,
- Smart Property
- Smart Contracts
- Decentralized Governance Services.
- The Blockchain is an Information Technology

**Unit 4 Cyber Security:**

- Introduction
- Network and website Security Risks

- Hacking
- Privacy Risk
- Cyber Defamation
- Identity Theft & Fraud
- Digital Forgery
- Cyber terrorism
- Cyber Pornography
- Digital Forgery
- Digital Signature
- E- business Risk management issues
- Firewall, Security framework

**Unit 5 Cyber Laws:**

- Cyber Crimes against Individuals, Institution and State
- Computer and mobile as target for crime
- Introduction to Cyber Laws
- Limitation of India's Cyber Laws
- Types of Civil Wrongs under the IT Act, 2000
- Punishments under the IT Act
- Intellectual Property Rights