

SVKM's NMIMS  
Mukesh Patel School of Technology Management and Engineering

<b>Program:</b> B. Tech. Computer Science & Business Systems				<b>Semester :</b> I	
<b>Course/Module :</b> Discrete Mathematics				<b>Module Code:</b> BTCS01001	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50)</b>	<b>Term End Examinations (TEE) (Marks- 100 in Question Paper)</b>
3	0	1	4	Marks Scaled to 50	Marks Scaled to 50

**Pre-requisite:**

Knowledge of Basic concepts in Number theory, Algebra and Pre-Calculus.

**Course Objectives:**

1. To introduce basic concepts of Calculus and its applications.
2. To train the students in the construction and understanding of mathematical proofs and common mathematical arguments.
3. To prepare the students to use the basic concepts of discrete mathematics in the subsequent courses of computer science.

**Course Outcomes:**

After completion of the course, students would be able to:

1. define and relate basic notions of discrete mathematics and calculus.
2. demonstrate the ability to understand mathematical logic, principles of boolean algebra and mathematical proof techniques.
3. solve problems based on the concepts of abstract algebra and combinatorics.
4. demonstrate understanding of the applications of calculus, algebra and combinatorics.

**Detailed Syllabus:**

Unit	Description	Duration
1.	<b>Boolean algebra</b> Introduction of Boolean algebra, truth table, basic logic gate, basic postulates of Boolean algebra, principle of duality, canonical form, Karnaugh map.	10
2.	<b>Calculus</b> Basic concept of differential calculus and integral calculus, application of double and triple integral.	12
3.	<b>Abstract algebra</b> Set, relation, group, ring, field.	12
4.	<b>Combinatorics</b> Basic counting, balls and bins problems, generating functions, recurrence relations, Proof techniques, principle of mathematical induction, pigeonhole principle.	11
	<b>Total</b>	<b>45</b>

**Text Books:**

1. I. N. Herstein, "Topics in Algebra", John Wiley and Sons, 2<sup>nd</sup> Edition.

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2. M. Morris Mano (2015), "Digital Logic & Computer Design", Pearson, 5<sup>th</sup> Edition.
3. B. S. Grewal, "Higher Engineering Mathematics", Khanna Publication, 44<sup>th</sup> Edition.

**Reference Books:**

1. Gilbert Strang, (2016) "Introduction to linear algebra", Wellesley- Cambridge Press, 5<sup>th</sup> Edition.
2. Peter V. O'Neil (2011), "Advanced Engineering Mathematics", Thomson Learning, 7<sup>th</sup> Edition.
3. M. D. Greenberg, (2002) "Advanced Engineering Mathematics", Pearson Education, 2nd Edition.
4. P. N. Wartikar and J. N. Wartikar, "Applied Mathematics"- Vol. I & II, Vidyarthi Prakashan.

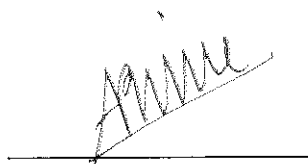
**Any other information:**

**Details of Internal Continuous Assessment (ICA)**

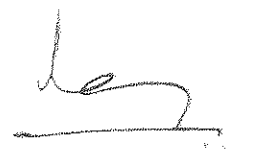
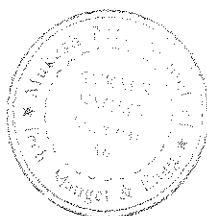
**Test Marks :20**

**Term Work Marks: 30**

**Details of Term work: As per Institute Norms.**



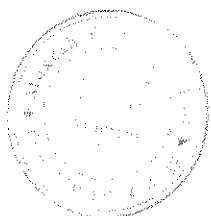
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SVKM's NMIMS  
Mukesh Patel School of Technology Management and Engineering

<b>Program:</b> B. Tech. Computer Science & Business Systems				<b>Semester :</b> I	
<b>Course/Module :</b> Probability & Statistics				<b>Module Code:</b> BTCS01002	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50)</b>	<b>Term End Examinations (TEE) (Marks- 100 in Question Paper)</b>
3	0	1	4	Marks Scaled to 50	Marks Scaled to 50
<b>Pre-requisite:</b> Knowledge of Permutation, Combination, Derivatives and Integration.					
<b>Course Objectives:</b> <ol style="list-style-type: none"> <li>1. To instill in students, sound knowledge of probability theory and statistical techniques.</li> <li>2. To equip the students with intermediate to advanced level concepts and tools in probability and statistics that help them tackle relevant problems within engineering domain.</li> </ol>					
<b>Course Outcomes:</b> After completion of the course, students would be able to: <ol style="list-style-type: none"> <li>1. Solve problems involving conditional probability and moments.</li> <li>2. Identify suitable probability distribution and statistical techniques to solve problems.</li> <li>3. Apply knowledge of various sampling techniques, probability distributions, measures of central tendency, correlation and regression to solve real life problems.</li> <li>4. Analyse data samples using statistical methods.</li> </ol>					
<b>Detailed Syllabus:</b>					
<b>Unit</b>	<b>Description</b>				<b>Duration</b>
1.	<b>Probability:</b> Concept of experiments, sample space, event. Definition of Combinatorial Probability. Conditional Probability, Bayes Theorem.				4
2.	<b>Expected values and moments:</b> Mathematical expectation and its properties, Moments (including variance) and their properties, interpretation, Moment generating function.				4
3.	<b>Probability distributions:</b> Discrete probability distributions: Binomial, Poisson and Geometric distributions, Uniform distribution. Continuous probability distributions: Exponential, Normal distribution, Chi- square, t, F distributions.				18



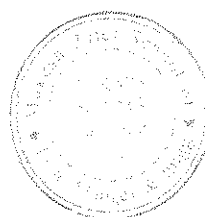
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4.	<b>Introduction to Statistics:</b> Definition of Statistics. Basic objectives. Applications in various branches of science with examples. Collection of Data: Internal and external data, Primary and secondary Data. Population and sample, Representative sample.	5
5.	<b>Descriptive Statistics:</b> Classification and tabulation of univariate data, graphical representation, Frequency curves. Descriptive measures - central tendency and dispersion. Bivariate data. Summarization, marginal and conditional frequency distribution. Scatter diagram. Linear regression and correlation. Least squares method. Rank correlation.	8
6.	<b>Sampling Techniques:</b> Random sampling. Sampling from finite and infinite populations. Estimates and standard error (sampling with replacement and sampling without replacement), Sampling distribution of sample mean, stratified random sampling.	6
	<b>Total</b>	<b>45</b>
<b>Text Books:</b> <ol style="list-style-type: none"> <li>1. Veerarajan T, (2017) "Probability, Statistics and Random Processes", McGraw hill Education, 4<sup>th</sup> Edition.</li> <li>2. S. M. Ross, "Introduction of Probability Models", Academic Press, N.Y.</li> <li>3. A. Goon, M. Gupta and B. Dasgupta, "Fundamentals of Statistics", vol. I &amp; II, World Press.</li> </ol>		
<b>Reference Books:</b> <ol style="list-style-type: none"> <li>1. W. Feller, (2017) "An Introduction to Probability Theory and its Applications", Vol.1, John Wiley &amp; Sons, 3<sup>rd</sup> Edition.</li> <li>2. S. M. Ross, (2018) "A first course in Probability", Prentice Hall, 10<sup>th</sup> Edition.</li> <li>3. I. R. Miller, J.E. Freund and R. Johnson, "Probability and Statistics for Engineers", 4<sup>th</sup> Edition, PHI.</li> <li>4. A. M. Mood, F.A. Graybill and D.C. Boes, "Introduction to the Theory of Statistics", McGraw Hill Education.</li> </ol>		
<b>Any Other Information:</b>  <b>Details of Internal Continuous Assessment (ICA)</b>  <b>Test Marks :20</b> <b>Term Work Marks: 30</b> <b>Details of Term work: As per Institute Norms.</b>		

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SVKM's NMIMS  
Mukesh Patel School of Technology Management and Engineering

<b>Program:</b> B. Tech. Computer Science & Business Systems				<b>Semester:</b> I	
<b>Course/Module:</b> Fundamentals of Computer Science				<b>Module Code:</b> BTCS01003	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50)</b>	<b>Term End Examinations (TEE) (Marks- 100 in Question Paper)</b>
2	2	1	4	Marks Scaled to 50	Marks Scaled to 50
<b>Pre-requisite:</b> Nil					
<b>Course Objectives:</b> <ol style="list-style-type: none"> <li>1. Develop problem solving skills using basic Sequential Logic Structure, Decisions and Loops.</li> <li>2. Enable students to implement complex problems using the knowledge of Arrays, Functions, Structures and Pointers.</li> </ol>					
<b>Course Outcomes:</b> After completion of the course, students would be able to: <ol style="list-style-type: none"> <li>1. Apply the knowledge of basic programming constructs, decision making, and iterations.</li> <li>2. Develop modular programs using functions and concept of recursion.</li> <li>3. Implement programs using concept of arrays, pointers and structures.</li> <li>4. Understand Unix interface and perform file handling.</li> </ol>					
<b>Detailed Syllabus:</b>					
<b>Unit</b>	<b>Description</b>				<b>Duration</b>
1.	<b>Types Operator and Expressions with discussion of variable naming and Hungarian Notation:</b> Variable Names, Data Type and Sizes (Little Endian Big Endian), Constants, Declarations, Arithmetic Operators, Relational Operators, Logical Operators, Type Conversion, Increment Decrement Operators, Bitwise Operators, Assignment Operators and Expressions, Precedence and Order of Evaluation, proper variable naming and Hungarian Notation				2
2.	<b>Control Flow with discussion on structured and unstructured programming:</b> Statements and Blocks, If-Else-If, Switch, Loops - while, do, for, break and continue, Goto Labels, structured and un-structured programming				7
3.	<b>Functions and Program Structure with discussion on standard library:</b> Basics of functions, parameter passing and returning type, C main return as integer, External, Auto, Local, Static, Register Variables, Scope Rules, Block structure, Initialization, Recursion,				5

	Preprocessor, Standard Library Functions and return types	
4.	<b>Pointers and Arrays:</b> Pointers and address, Pointers and Function Arguments, Pointers and Arrays, Address Arithmetic, character Pointers and Functions, Pointer Arrays, Pointer to Pointer, Multi-dimensional array and Row/column major formats, Initialization of Pointer Arrays, Command line arguments, Pointer to functions, complicated declarations and how they are evaluated	8
5.	<b>Structures:</b> Basic Structures, Structures and Functions, Array of structures, Pointer of structures, Self-referral Structures, Table look up, Typedef, Unions, Bit-fields	4
6.	<b>Input and Output:</b> Standard I/O, Formatted Output - printf, Formatted Input - scanf, Variable length argument list, file access including FILE structure, fopen, stdin, stdout and stderr, Error Handling including exit, perror and error.h, Line I/O, related miscellaneous functions	2
7.	<b>Unix system Interface:</b> File Descriptor, Low level I/O - read and write, Open, create, close and unlink, Random access - lseek, Discussions on Listing Directory, Storage allocator	2
	<b>Total</b>	<b>30</b>

**Text Books:**

1. B. W. Kernighan & D. M. Ritchie (1988), "The C Programming Language", Prentice Hall Software Series, 2<sup>nd</sup> Edition
2. B. Gottfried (2018), "Programming in C", Schaum Outline Series, McGraw Hill, 2<sup>nd</sup> Edition

**Reference Books:**

1. Herbert Schildt (2000), "C: The Complete Reference", McGraw Hill, 4<sup>th</sup> Edition.
2. Yashavant Kanetkar (2017), "Let Us C", BPB Publications, 16<sup>th</sup> Edition.

**Any other information:**

**Laboratory**

1. Algorithm and flowcharts of small problems like GCD
2. Structured code writing with:
  - i. Small but tricky codes
  - ii. Proper parameter passing
  - iii. Command line Arguments
  - iv. Variable parameter
  - v. Pointer to functions
  - vi. User defined header
  - vii. Make file utility

- viii. Multi file program and user defined libraries
- ix. Interesting substring matching / searching programs
- x. Parsing related assignments

**Details of Internal Continuous Assessment (ICA)**

**Test Marks: 20**

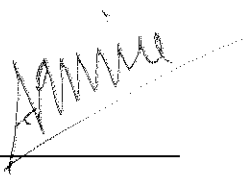
**Term Work Marks: 30**

**Details of Term work:**

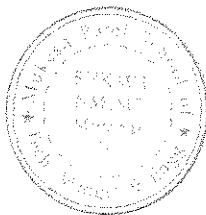
Tutorial / Lab work / Viva / Mini project / Quizzes / Assignments

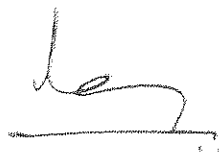
Minimum two class tests

Minimum ten practical lab experiments covering all the topics

  
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SVKM's NMIMS  
Mukesh Patel School of Technology Management and Engineering

<b>Program:</b> B. Tech. Computer Science & Business Systems				<b>Semester :</b> I	
<b>Course/Module:</b> Principles of Electrical Engineering				<b>Module Code:</b> BTCS01004	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50)</b>	<b>Term End Examinations (TEE) (Marks- 100 in Question Paper)</b>
3	2	0	4	Marks Scaled to 50	Marks Scaled to 50
<b>Pre-requisite:</b> Nil					
<b>Course Objectives:</b> <ol style="list-style-type: none"> <li>1. To introduce the concept of DC, AC circuits and electromagnetism.</li> <li>2. To make the students understand the concept and working of transformer, measuring devices and sensors.</li> </ol>					
<b>Course Outcomes:</b> After completion of the course, students would be able to: <ol style="list-style-type: none"> <li>1. Analyze DC circuits using network theorems</li> <li>2. Analyze AC circuits using AC fundamentals.</li> <li>3. Understand the basic concepts of electromechanics, electrostatics and magnetic circuits.</li> <li>4. Introduce measuring devices, sensors and components of electrical installations.</li> </ol>					
<b>Detailed Syllabus:</b>					
<b>Unit</b>	<b>Description</b>				<b>Duration</b>
1.	<b>Introduction and overviews:</b> Electron Devices, Circuits and Systems, Integrated Circuits, Analog and digital signals				2
2.	<b>Basic Concepts and Circuit Analysis:</b> Concept of Potential difference, voltage, current, Fundamental linear passive and active elements to their functional current-voltage relation, Terminology and symbols in order to describe electric networks, Concept of work, power, energy and conversion of energy. DC Circuits-Current-voltage relations of electric network by mathematical equations to analyse the network (Thevenin's theorem, Norton's Theorem, Maximum Power Transfer theorem) voltage source and current sources, ideal and practical, Kirchhoff's laws and applications to network solutions using mesh analysis, Simplifications of networks using series- parallel, Star/Delta transformation. Superposition theorem. AC Circuits-AC waveform definitions, form factor, peak factor, study of R-L, R-C,RLC series circuit, R-L-C parallel circuit, phasor representation in polar and rectangular form, concept of impedance, admittance, active, reactive, apparent and complex				20



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	power, power factor, 3 phase Balanced AC Circuits.	
3.	<b>Principle of Electromechanics and Electrostatics:</b> Electrostatic field, electric field intensity, electric field strength, absolute permittivity, relative permittivity, capacitor composite, dielectric capacitors, capacitors in series & parallel, energy stored in capacitors, charging and discharging of capacitors, Principle of batteries, types, construction and application. Electro-mechanics: Electricity and Magnetism, magnetic field and faraday's law, self and mutual inductance, Ampere's law, Magnetic circuit, Magnetic material and B-H Curve, Single phase transformer, principle of operation, EMF equation, voltage ratio, current ratio, KVA rating, efficiency and regulation, Electromechanical energy conversion, Basic concept of indicating and integrating instruments.	16
4.	<b>Measurements and Sensors:</b> Introduction to measuring devices/sensors and transducers related to electrical signals, Elementary methods for the measurement of electrical quantities in DC and AC systems and their practical application. Electrical Wiring and Illumination system: Basic layout of distribution system, Types of Wiring System & Wiring Accessories, Necessity of earthing, Types of earthing, Different types of lamps (Incandescent, Fluorescent, Sodium Vapour, Mercury Vapour, Metal Halide, CFL, LED)	7
	<b>Total</b>	<b>45</b>
<b>Text Books:</b> <ol style="list-style-type: none"> <li>1. A. E. Fitzgerald, Kingsely Jr Charles and D. Umans Stephen (2005), "Electric Machinery", Tata McGraw Hill, 6th Edition.</li> <li>2. B. L. Theraja (2014), "A Textbook of Electrical Technology", vol. I, S. Chand and Company Ltd., 24<sup>th</sup> Edition.</li> <li>3. V. K. Mehta (2012), "Basic Electrical Engineering", S. Chand and Company Ltd., 14<sup>th</sup> Edition.</li> <li>4. J. Nagrath and D. Kothari (2017), "Theory and problems of Basic Electrical Engineering", Prentice Hall of India Pvt. Ltd, 2nd Edition.</li> </ol>		
<b>Reference Books:</b> <ol style="list-style-type: none"> <li>1. Edward Hughes (2008), "Electrical and Electronic Technology", Pearson Education Publication, 10th Edition.</li> <li>2. Vincent. Del. Toro (2015), "Electrical Engineering Fundamentals", Prentice Hall India, 2nd Edition.</li> <li>3. Sudhakar Shyammohan (2015), "Circuits and Networks: Analysis and Synthesis", Tata McGraw Hill Education, 5th Edition.</li> </ol>		
<b>Any other Information:</b> <b>Laboratory</b> <ol style="list-style-type: none"> <li>1. Familiarization of electrical Elements, sources, measuring devices and transducers related to electrical circuits</li> </ol>		

2. Determination of resistance temperature coefficient
3. Verification of Network Theorem (Superposition, Thevenin, Norton, Maximum Power Transfer theorem)
4. Simulation of R-L-C series circuits for  $X_L > X_C$ ,  $X_L < X_C$  &  $X_L = X_C$
5. Simulation of Time response of RC circuit
6. Verification of relation in between voltage and current in three phase balanced star and delta connected loads.
7. Demonstration of measurement of electrical quantities in DC and AC systems.

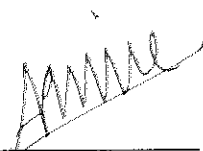
**Details of Internal Continuous Assessment (ICA)**

**Test Marks: 20**

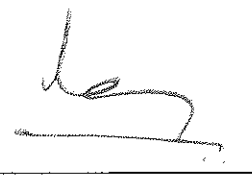
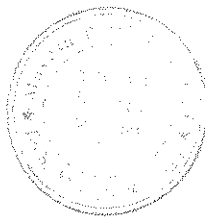
**Term Work Marks: 30**

**Details of Term work:**

Assignments based on the whole syllabus, duly recorded and graded.



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<b>Program:</b> B. Tech. Computer Science & Business Systems				<b>Semester :</b> I	
<b>Course/Module :</b> Fundamentals of Physics				<b>Module Code:</b> BTCS01005	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50)</b>	<b>Term End Examinations (TEE) (Marks- 100 in Question Paper)</b>
3	2	0	4	Marks Scaled to 50	Marks Scaled to 50
<b>Pre-requisite:</b> knowledge of 12 <sup>th</sup> Grade level physics					
<b>Course Objectives:</b> <ol style="list-style-type: none"> <li>1. To enable students to understand the basic principles of optics, electricity and magnetism, quantum physics thermodynamics and their applications.</li> <li>2. To enhance the student's ability to apply the principles of Physics in solving engineering problems in everyday life.</li> </ol>					
<b>Course Outcomes:</b> After completion of the course, students would be able to: <ol style="list-style-type: none"> <li>1. understand the principles of wave motion and optics viz., diffraction, polarization and apply the same to different technologies like LASER and Fiber Optics.</li> <li>2. interpret the laws of electromagnetism and various terms related to electromagnetic properties of matter such as, permeability, polarization, etc.</li> <li>3. explain the basic laws related to quantum mechanics and apply them to solve simple quantum mechanical problems.</li> <li>4. Understand the basics principles of crystallography, semiconductors and thermodynamics.</li> </ol>					
<b>Detailed Syllabus:</b>					
<b>Unit</b>	<b>Description</b>				<b>Duration</b>
1.	<b>Oscillation and fundamental of wave optics</b> Periodic motion-simple harmonic motion-characteristics of simpleharmonic motion-vibration of simple springs mass system. Resonance-definition., dampedharmonic oscillator - heavy, critical and light damping, energy decay in a damped harmonicoscillator, quality factor, forced mechanical and electrical oscillators.				7
2.	<b>Interference-principle of superposition-young's experiment</b> Theory of interference fringes-types of interference-Fresnel's prism-Newton's rings, Diffraction-Two kinds of diffraction-Difference				8

	between interference and diffraction-Fresnel's half period zone and zone plate-Fraunhofer diffraction at single slit-plane diffraction grating.Temporal and Spatial Coherence.	
3.	<b>Polarization of light</b> Polarization - Concept of production of polarized beam of light from two SHM acting at right angle; plane, elliptical and circularly polarized light, Brewster's law, double refraction.	3
4.	<b>Basic Idea of Electromagnetisms</b> Continuity equation for current densities, Maxwell's equation in vacuum and non-conducting medium	4
5.	<b>Quantum Mechanics and Crystallography:</b> Introduction - Planck's quantum theory- Matter waves, de-Broglie wavelength, Heisenberg's Uncertainty principle, time independent and time dependent Schrödinger's wave equation, Physical significance of wave function, Particle in a one dimensional potential box, Heisenberg Picture. Crystallography - Basic terms-types of crystal systems, Bravais lattices, miller indices, d spacing, Debye Scherrer powder method, laue method- Atomic packing factor for SC, BCC, FCC and HCP structures. Semiconductor Physics - conductor, semiconductor and Insulator; Basic concept of Band theory	12
6.	<b>Laser and Fiber optics:</b> Einstein's theory of matter radiation interaction and A and B coefficients; amplification of light by population inversion, different types of lasers: Ruby Laser, CO <sub>2</sub> and Neodymium lasers; Properties of laser beams: mono-chromaticity, coherence, directionality and brightness, laser speckles, applications of lasers in engineering. Fiber optics and Applications, Types of optical fibers	6
7.	<b>Thermodynamics</b> Zeroth law of thermodynamics, first law of thermodynamics, brief discussion on application of 1st law, second law of thermodynamics and concept of Engine, entropy, change in entropy in reversible and irreversible processes, third law of thermodynamics.	5
	<b>Total</b>	<b>45</b>
<b>Text Books:</b> <ol style="list-style-type: none"> <li>1. Beiser A (2015), "Concepts of Modern Physics", Tata McGraw Hill International, 7<sup>th</sup> edition (SIE).</li> <li>2. David Halliday, (2000) Robert Resnick, Jearl Walker, "Fundamentals of Physics", Wileyplus, 6<sup>th</sup> Edition.</li> </ol>		



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**Reference Books:**

1. Ajoy Ghatak, (2017) "Optics", McGraw Hill Education (India), 6<sup>th</sup> Edition.
2. Sears & Zemansky, (2017) "University Physics", Pearson Education, Addison-Wesley, 14<sup>th</sup> Edition.
3. Jenkins and White, (2017) "Fundamentals of Optics", McGraw-Hill, 4<sup>th</sup> Edition.

**Any other information:**

**Laboratory Experiments**

1. Magnetic field along the axis of current carrying coil - Stewart and Gee
2. Determination of Hall coefficient of semi conductor
3. Determination of Plank constant
4. Determination of wave length of light by Laser diffraction method
5. Determination of wave length of light by Newton's Ring method
6. Determination of laser and optical fiber parameters
7. Determination of Stefan's Constant.

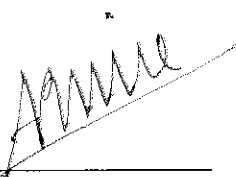
**Details of Internal Continuous Assessment (ICA)**

**Test Marks: 20**

**Term Work Marks: 30**

**Details of Term work:**

1. Assignments
2. Laboratory experiments
3. Viva/practical exam



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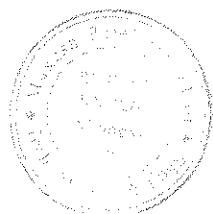


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<b>Program: B. Tech. Computer Science &amp; Business Systems</b>				<b>Semester : I</b>	
<b>Course/Module: Business Communication &amp; Value Science - I</b>				<b>Module Code: BTCS01006</b>	
<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>	
<b>Lecture (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credit</b>	<b>Internal Continuous Assessment (ICA) (Marks - 50 )</b>	<b>Term End Examinations - (TEE) ((Marks- 100 in Question Paper)</b>
3	2	0	4	Marks Scaled to 50	Marks Scaled to 50
<b>Pre-requisite: Basic Knowledge of high school English</b>					
<b>Course Objectives:</b> <ol style="list-style-type: none"> <li>1. Understand what life skills are and their importance in leading a happy and well-adjusted life</li> <li>2. Motivate students to look within and create a better version of self</li> <li>3. Introduce the students to key concepts of values, life skills and business communication</li> </ol>					
<b>Course Outcomes:</b> <b>After completion of the course students will be able to:</b> <ol style="list-style-type: none"> <li>1. understand the need for life skills and values</li> <li>2. understand and recognize own strengths and opportunities and apply the life skills to different situations</li> <li>3. Understand the basic tenets of communication</li> <li>4. Apply the basic communication practices in different types of communication</li> </ol>					
<b>Detailed Syllabus:</b>					
<b>Unit</b>	<b>Description</b>				<b>Duration</b>
1.	<b>Overview of Business Communication and Leadership Oriented Learning (LOL):</b> effective communication through correct listening, speaking , reading and writing( Imparted through activities designed for the purpose) ; self-awareness -identity, body awareness, stress management				10
2.	<b>The basic tenets of communication-I :</b> Essential Grammar-parts of speech, tenses; Sentence Formation (general and technical)- active and passive voice, common errors ; Communication Skills- overview of communication skills, barriers to communication, effective communication, verbal and nonverbal communication ( skit based on communication skills); <b>Listening Skills-</b> Law of nature- Importance of listening skills, Difference between listening and hearing, Types of listening(listening activity); <b>Expressing self-</b> connecting with emotions, visualizing and experiencing purpose , importance of questioning				10



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3.	<b>The basic tenets of communication-II -Talk Mail Write (TMW) :</b> Email Writing, Verbal communication- oral-pronunciation and clarity of speech, Written Communication-email-formal and informal , CV, Summary writing, story writing; Vocabulary Enrichment- Exposure to words from General Service List (GSL) by West, Academic word list (AWL) technical specific terms related to the field of technology, phrases, idioms, significant abbreviations formal business vocabulary	10
4.	<b>Introduction to life skills:</b> What are the critical life skills; Stress management; working with rhythm and balance; teamwork ; Multiple Intelligences; Embracing diversity	15
	<b>Total</b>	<b>45</b>

**Text Books:**

1. Bovee, C., Thill, J., & Roshan Lal Raina (2013). "Business Communication Today" (14th ed.). Pearson.
2. Lester, Mark and Beason, Larry (2017); 'The McGraw Hill Handbook of English Grammar and Usage', McGraw Hill Education, 1st edition

**Reference Books:**

1. M. McCarthy and Felicity O'Dell, "English Vocabulary in Use", Cambridge University Press, 2002
2. S Hiremath, "Business Communication", Nirali Prakashan, 2014
3. APAART: Speak Well 1 (English language and communication)
4. APAART: Speak Well 2 (Soft Skills)

**Online Resources:**

<https://www.coursera.org/learn/learning-how-to-learn>

<https://www.coursera.org/specializations/effective-business-communication>

**Web References:**

Train your mind to perform under pressure- Simon sinek

<https://curiosity.com/videos/simon-sinek-on-training-your-mind-to-perform-under-pressure-capture-your-flag/>

Brilliant way one CEO rallied his team in the middle of layoffs

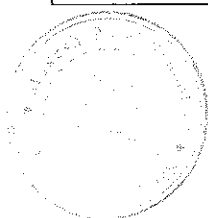
<https://www.inc.com/video/simon-sinek-explains-why-you-should-put-people-before-numbers.html>

Will Smith's Top Ten rules for success

<https://www.youtube.com/watch?v=bBsT9omTeh0>

**Any other information:**

Pedagogy for imparting of the course content and evaluation purposes are extremely important component of this course. Various topics are to be imparted



*SVKM's NMIMS*

through activities specifically designed for the topic. Following are the details:

**Unit 1-**

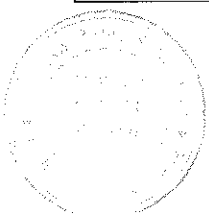
- **Overview of LOL**
  - activity on introducing self
  - Class activity – presentation on favorite cricket captain in IPL and the skills and values they demonstrate
  - Self-work with immersion – interview a maid, watchman, sweeper, cab driver, beggar and narrate what you think are the values that drive them
- **Overview of business communication**
  - Activity: Write a newspaper report on an IPL match
  - Activity: Record a conversation between a celebrity and an interviewer
- **Self-awareness**
  - Dance Movement Therapy with integrated arts

**Unit 2-**

- **Essential Grammar**
  - Refresher on Parts of Speech – Listen to an audio clip and note down the different parts of speech followed by discussion
  - Tenses: Applications of tenses in Functional Grammar – Take a quiz and then discuss
  - Sentence formation (general & Technical), Common errors, Voices- Show sequence from film where a character uses wrong sentence structure (e.g. Zindagi Na Milegi Dobara where the characters use 'the' before every word)
- **Types of communication- verbal and non -verbal**
  - Role-play based learning
- **Listening Skills**
  - Listening activity –playing an audio clip and listening for details
- **Expressing self**
  - Dance Movement Therapy with integrated arts

**Unit 3-**

- **Email writing**
  - Email writing activity
- **Pronunciation and clarity of speech**
  - Audio and video based learning
- **Vocabulary Enrichment**
  - Group discussion using words learnt; Flipped classroom where students will study words before coming to class -Read Economic Times, Reader's Digest, National Geographic and take part in a GD, using the words you learnt/liked from the articles.
  - Practice: Toastmaster style Table Topics speech with evaluation
  - story and summary writing



*Amul*



- **Life skill: Stress management, working with rhythm and balance, teamwork**  
- Dance Movement Therapy with integrated arts

**Unit 4-**

- **Introduction to life skills**  
- Activity and Video on critical life skills
- **Understanding Life Skills**  
-Movie based learning – Pursuit of Happyness. What are the skills and values you can identify, what can you relate to?
- **Embracing diversity**  
- Activity and video on appreciation of diversity

**Details of Internal Continuous Assessment (ICA)**

**Test Marks: 20**

**Term Work Marks: 30**

**Details of Term work:**

**Unit 1**

- 30 minutes Quiz on Unit 1
- Activity: Write a newspaper report on an IPL match( Class activity with 3 iterations )
- Activity: Record a conversation between a celebrity and an interviewer (Class activity with 3 iterations )

**Unit 2-**

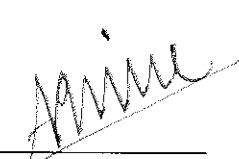
- Activity: Skit based on communication skills
- Evaluation on Listening skills – listen to recording and answer questions based on them

**Unit 3-**

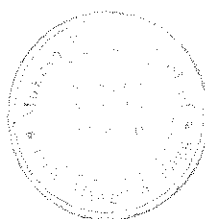
- Build your CV – start writing your comprehensive CV including every achievement in your life, no format, no page limit
- Project: Create a podcast on a topic that will interest college students

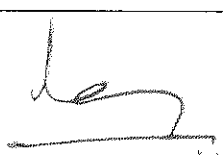
**Unit 4-**

- Life skill: Community service – work with an NGO and make a presentation-  
Field work
- Life skill: Join a trek – Values to be learned: Leadership, teamwork, dealing with ambiguity, managing stress, motivating people, creativity, result orientation-  
Field work

  
\_\_\_\_\_  
**Signature**

**(Prepared by Concerned Faculty/HOD)**



  
\_\_\_\_\_  
**Signature**

**(Approved by Dean)**