



**Vidya Pratishthan's Kamalnayan Bajaj Institute of  
Engineering and Technology, Baramati**

**Department of Electronics and Telecommunication Engineering  
Open Elective Curriculum S.Y. B. Tech E&TC Engineering 2024-25**

# Open Elective Curriculum of Electronics and Telecommunication Engineering

2023 Pattern – T.Y. EnTC


| Subject Code | Subject                 | Subject Credits | Teaching Scheme |    |    |     | Examination Scheme |     |     |                     |    |    |  | Credits |    |     | Total |
|--------------|-------------------------|-----------------|-----------------|----|----|-----|--------------------|-----|-----|---------------------|----|----|--|---------|----|-----|-------|
|              |                         |                 |                 |    |    |     | Theory             |     |     | Practical/ Tutorial |    |    |  |         |    |     |       |
|              |                         |                 | WL Type         | TH | PR | TUT | Activity           | ISE | ESE | TW                  | PR | OR |  | TH      | PR | Tut |       |
| OE23002      | Professional Leadership | 2               | TP              | 2  | -  | -   | -                  | -   | 50  | -                   | -  | -  |  | 2       | -  | -   | 2     |
| OE23016      | Accounting & Finance    | 2               | TP              | 2  | -  | -   | -                  | -   | 50  | -                   | -  | -  |  | 2       | -  | -   | 2     |
| OE23018      | Agriculture Technology  | 2               | TP              | 2  | -  | -   | -                  | -   | 50  | -                   | -  | -  |  | 3       | -  | -   | 2     |

  
SD Biradar

Autonomy Coord.

  
Dr. JS Rangole

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Dr. SM Bhosle

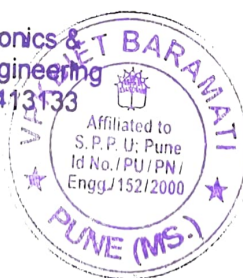
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Head



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## Bucket of Open Elective Courses

| Open Elective Subjects |                                 |
|------------------------|---------------------------------|
| Subject Code           | Subject Name                    |
| OE23001                | Digital Marketing               |
| OE23002                | Professional Leadership         |
| OE23003                | Organizational Behaviour        |
| OE23004                | Industrial Management           |
| OE23005                | Disaster Management             |
| OE23006                | Energy Economics & Management   |
| OE23007                | Operations Research             |
| OE23008                | Intellectual Property Rights    |
| OE23009                | Cyber Laws                      |
| OE23010                | Bioinformatics                  |
| OE23011                | Biotechnology                   |
| OE23012                | International Relations         |
| OE23013                | Universal Human Values          |
| OE23014                | Education Technology            |
| OE23015                | Design Thinking                 |
| OE23016                | Accounting & Finance            |
| OE23017                | Sustainability & Climate Change |
| OE23018                | Agriculture Technology          |
| OE23019                | Architectural Technology        |

**Open Elective-1**  
**OE23016:-Accounting and Finance**

**Teaching Scheme:**  
**Theory: 02 Hours/Week**

**Credits**  
**02**

**Examination Scheme:**  
**Activity: 20 Marks**  
**End Sem: 50 Marks**

**Prerequisite Courses, if any: Nil**

**Course Objectives:**

The course will enable the learners to:

- To gain a working knowledge of the principles and procedure of accounting and their application
- To gain the ability to solve problems.
- To enable the learners to gain a working knowledge of principles, procedures and preparation of Final accounts.
- To enable the learners to learn the Hire Purchase and Installment Purchase System and its allied aspects of accounting
- Understand the meaning and features of Non-Trading Concerns' Accounts
- To provide knowledge in accounting for Depreciation

**Course Outcomes:**

After the completion of the course, students will be able to-

1. Acquire conceptual knowledge of the basics of accounting
2. Identify events that need to be recorded in the accounting records
3. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP
4. Equip with the knowledge of accounting process and preparation of final accounts of sole trader and company
5. Recognize circumstances providing for increased exposure to errors and fraud
6. Determine the useful life and value of the depreciable asset

**Course Contents**

**UNIT I: Introduction to Accounting (06 Hrs.)**

Meaning and Scope of Accounting: Need, development, and Definition of Accounting - Bookkeeping and Accounting - Persons interested in accounting – Disclosures - Branches of Accounting - Objectives of Accounting - Accounting Principles International Accounting Standards (only outlines) - Accounting principles - Accounting Standards in India.

**UNIT II: Double Entry System and Final Accounts of Sole Trading Concern (06 Hrs.)**

Double Entry system and Book Keeping - Rules of debit and credit - Accounting Cycle transactions - Journal - Compound journal entry - Opening entry – Relationships - Ledger –Journal Vs Ledger - Rules regarding posting - Preparation of Trial Balance - Preparation of Final Accounts of Sole Traders – Preparation of Cash Book.

**UNIT III: Non-Trading Accounts (07 Hrs.)**

Non-Trading Concerns' Accounts – Capital Vs. Revenue Accounts - Preparation of Receipt and Payment Account - Income & Expenditure Account and Balance sheet (simple problems) - Classification of Errors - Rectification of errors- Preparation of Suspense Account - Bank Reconciliation Statement (Only simple problems)

**UNIT IV: Hire Purchase Accounting and Bill of Exchange (06 Hrs.)**

Meaning and Definition of Hire Purchase and Installment Purchase System- the difference between Hire Purchase and Installment Purchase – Importance – Hire Purchase Agreement – Hire Purchase

Price – Cash Price – Hire Purchase Charges – Net Hire Purchase Price – Net Cash Price – Calculation of Interest – Calculation of Cash Price (Asset Accrual Method only) - Bills of exchange – Accommodation bills - Average due date – Account current.

**Text Books:**

1. S.P. Jain & K.L. Narang, "Advanced Accounting", Kalyani publishers New Delhi, Delhi, Volume – I, 18<sup>th</sup> Revised Edition.
2. T. S. Reddy and A. Murthy, "Financial Accounting", Margam publications, Chennai – 600 017, 7<sup>th</sup> revised edition.
3. R.L. Gupta and Radhasamy, "Advanced accounting" S. Chand & Company Ltd., New Delhi, edition.
4. Dr M.A. Arulanandam & Dr K.S. Raman, "Advanced Accountancy" Himalaya publications, New Delhi, 1<sup>st</sup> edition.
5. M.C. Shukla, T.S. Grewal & S.C. Gupta, "Advanced accounts", Sultan & Chand publications, New Delhi.
6. P.L. Nagarajan N.Vinayagam, Mani P. L., "Principles of Accountancy", S. Chand & Company Ltd, New Delhi.
7. T.S. Grewal, "Introduction to Accountancy", S. Chand & Company Ltd, New Delhi.
8. P.L. Tulsian – Advanced Accountancy – Tata MC Grow Hill companies.



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Dr. RS Bichkar  
Principal

| <p style="text-align: center;"><b>Open Elective Course-2</b></p> <p style="text-align: center;"><b>OEET230XX:- Professional Leadership</b></p>  |                             |   |
|---|-----------------------------|---|
| <b>Teaching Scheme:</b><br><b>Theory: 02 Hours/Week</b>   | <b>Credits</b><br><b>02</b> | <b>Examination Scheme:</b><br><b>Activity: 20 Marks</b><br><b>End Sem: 50 Marks</b> |
| <b>Prerequisite Courses, if any: Nil</b>  |                             |   |
| <b>Course Objectives:</b> <ul style="list-style-type: none"> <li>• To study and understand various microcontrollers and embedded systems</li> <li>• To understand the design parameters of embedded systems applications.</li> <li>• To study and impart different tools for embedded system and IoT application design.</li> </ul>   |                             |   |
| <b>Course Outcomes:</b><br>After the completion of the course, students will be able to-<br><b>CO1:</b> Understanding the concept of leadership and importance of leadership<br><b>CO2:</b> Learning the steps of Leadership behavior, traits, skills, and abilities<br><b>CO3:</b> How to analyze the styles of leadership and how to be connected with the organization<br><b>CO4:</b> How to develop your leadership skills in Business or organization<br><b>CO5:</b> Understand How to become a successful and effective business leader |                             |   |
| <p style="text-align: center;"><b>Course Contents</b></p>   |                             |   |
| <b>1. Introduction and Importance of Leadership</b><br>Begin your leadership odyssey by delving into the fundamental concepts of leadership. Understand why effective leadership is crucial in various contexts, and explore the impact of leadership on individuals, teams, and organizations. Gain insights into the evolving role of leaders in today's dynamic and interconnected world.  |                             |   |
| <b>2. Leadership Behavior, Traits, Skills, and Abilities</b><br>Uncover the core components of effective leadership, Analyze leadership behaviors, traits, and the essential skills and abilities that distinguish exceptional leaders. Through case studies and practical exercises, develop a deep understanding of your own leadership potential and areas for growth.   |                             |   |
| <b>3. Styles of Leadership</b><br>Examine different leadership styles and their applications in various situations. Explore autocratic, democratic, transformational, and situational leadership models. Learn how to adapt your leadership approach to different scenarios and team dynamics to maximize effectiveness and foster positive   |                             |   |

outcomes.

#### 4. Leadership in Business

Navigate the intricacies of leadership in the business world. Understand the unique challenges and opportunities faced by business leaders. Explore strategies for leading teams, driving innovation, and creating a positive organizational culture that enhances employee engagement and productivity.

#### 5. How to Become a Successful and Effective Business Leader

Cap off the course with practical insights and actionable steps on how to become a successful and effective business leader. Explore the art of decision-making, effective communication, and building high-performing teams. Develop a personalized leadership development plan to propel your career and make a lasting impact in the business realm.

#### Reference Books:

1. The Indisputable Laws of Teamwork: Embrace Them and Empower Your Team by John C Maxwell.
2. The Five Dysfunctions of a Team: A Leadership Fable by Patrick Lencioni.
3. Crucial Conversations: Tools for Talking When Stakes are High by Kerry Patterson, Joseph Grenny, et al T Leaders Eat Last by Simon Sinek.
4. Talking to Strangers: What We Should Know about the People We Don't Know by Malcolm Gladwell.
5. Team of Teams: New Rules of Engagement for a Complex World by Stanley McChrystal, Tantum Collins.

#### Online/ Udemy Course Link:

1. <https://www.udemy.com/course/leadership-management-skills-personal-development/?couponCode=LETSLEARNNOWPP>



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**Open Elective-3**  
**OE23018:- Agriculture Technology**

**Teaching Scheme:**  
**Theory: 02 Hours/Week**

**Credits**  
**02**

**Examination Scheme:**  
**Activity: 20 Marks**  
**End Sem: 50 Marks**

Prerequisite Courses, if any: Nil

**Course Outcomes:**

After the completion of the course, students will be able to-

1. Agricultural Fundamentals: Students will acquire a solid grasp of the core principles and historical significance of agriculture
2. Crop Science and Management: Students will learn about the growth, development, and physiology of crops.
3. Soil Science and Management: The course will cover essential soil properties, classification, and fertility. Students will learn how to conserve and manage soil
4. Irrigation and Water Management: Students will gain insights into different irrigation systems and effective water resource management in agriculture

**Course Contents**

**1. Soil Science (7 Hrs.)**

Definition and Origin of Soil, Rocks and Minerals, Soil Forming Process, Classification of Soil, Physical Properties of Soil, Soil Organic Colloids, Soil Organic Matters, Irrigation Water Quality, Soil Reaction, Essential Plant Nutrients, Inorganic Fertilizers, Methods of Fertilizer Application to Crops

**2. Agronomy (15 Hrs.)**

Definition and Scope of Agronomy, Classification of Crops, Effect of Weather Parameters on Crop Growth and Development, Tillage and Tilth, Soil-Water Plant Relationship, Weed Management, Cropping Systems

**3. Horticulture (17 Hrs.)**

Definition and Scope of Horticulture, Planting Methods, Nursery Raising Techniques, Propagation Methods, Training and Pruning, Irrigation Methods and Fertigation, Post-Harvest Practices of



Horticultural Crops, Management of Orchards, Extraction and Storage of Vegetable (Tomato) Seeds

#### 4. Differentiation Between Agricultural Terms & Role of Agricultural Engineering in Agriculture (5 Hrs.)

**Differentiation Between Agricultural Terms:** Soil Fertility and Soil Productivity, Saline Soil and Alkaline Soil Mixed Farming and Mixed Cropping, Weather and Climate, Pruning and Training

**Role of Agricultural Engineering in Agriculture:** Role of Agricultural Engineering in Agriculture, Important Role of Agricultural Engineering in Agriculture

##### Online/Udemy Course Links:

1. <https://www.udemy.com/course/basics-of-agriculture-for-engineers-building-a-strong-found/?couponCode=LETSLEARNNOWPP>



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