



D.N.R. COLLEGE OF ENGINEERING & TECHNOLOGY
AUTONOMOUS

Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada
Accredited with A⁺⁺ Grade by NAAC & Accredited by NBA (B. TECH – CSE, ECE & EEE)
Ph: 08816-221238 Email: dncet@gmail.com website: <https://dncet.org>

08-01-2026

**BOARD OF STUDIES MEETING
FOR
MASTER OF BUSINESS
ADMINISTRATION**

**DEPT. OF MASTER OF BUSINESS ADMINISTRATION,
DNR COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous)

BHIMAVARAM -AP- 534202



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HEARTLY WELCOME TO BOS MEMBERS

MASTER OF BUSINESS ADMINISTRATION

Dt: 08-01-2026

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Agenda

1. To discuss and finalize the proposed DR – 24 B.Tech III Year I Semesters Subject Entrepreneurship Development & Venture Creation Course Code: BT24HS3101 and Syllabus, offered by CSE, ECE, EEE, CIVIL and ME Branches.
2. To discuss and finalize the proposed DR – 24 B.Tech III Year I Semesters Subject Entrepreneurship Course Code: BT24HS3102 and Syllabus, offered by Mechanical Engineering Branch.
3. To discuss and finalize the proposed DR – 24 B.Tech III Year II Semesters Subject Research Methodology & IPR Course Code: BT24HS3201 and Syllabus, offered by ECE and EEE Branches.
4. To discuss and finalize the proposed DR – 24 M.Tech II Year I Semesters Subject Research Methodology & IPR Course Code: MTD2530000 and Syllabus, offered by CSE, ECE, CIVIL and ME Branches.

Annexure – I

**III B.Tech – I SEM
EDVC - SYLLABUS**



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B.TECH III YEAR - I SEMESTER

Common to CSE,ECE,EEE,CE,ME,CSE(AIML)&CSE(AIDS) Branches

III Year-I Semester	Course Code: BT24HS3101	L	T	P	C
		3	0	0	3
ENTREPRENEURSHIP DEVELOPMENT & VENTURE CREATION (Open Elective - 1)					

Course Objectives:

By the end of the program, students will be/able to:

1. Inspired; develop entrepreneurial mind-set and attributes; entrepreneurial skill sets for venture creation and entrepreneurial leadership
2. Apply process of problem-opportunity identification and feasibility assessment through developing a macro perspective of the real market, industries, domains and customers while using design thinking principles to refine and pivot their venture idea.
3. Analyze Customer and Market segmentation, estimate Market size, develop and validate Customer Persona.
4. Initiate Solution design, Prototype for Proof of Concept. Understand MVP development and validation techniques to determine Product-Market fit
5. Craft initial Business and Revenue models, financial planning and pricing strategy for profitability and financial feasibility of a venture. Understand relevance and viability of informal and formal funding with respect to different business models.
6. Understand and develop Go-to-Market strategies with a focus on digital marketing channels.

Course Outcomes

At the end of the course, students will be able to

1. Develop an entrepreneurial mindset and appreciate the concepts of entrepreneurship, cultivate essential attributes to become an entrepreneur or Entrepreneur and demonstrate skills such as problem solving, team building, creativity and leadership
2. Comprehend the process of problem-opportunity identification through design thinking, identify market potential and customers while developing a compelling value proposition solution
3. Analyse and refine business model to ensure sustainability and profitability
4. Build Prototype for Proof of Concept and validate MVP of their practice venture idea
5. Create business plan, conduct financial analysis and feasibility analysis to assess the financial viability of a venture
6. Prepare and deliver an investible pitch deck of their practice venture to attract stakeholders

Course Content

Twelve learning modules organized over 14 weeks in the following logical flow of units

Unit I: Entrepreneurship Fundamentals & Context

Meaning and concept, attributes and mindset of entrepreneurial and entrepreneurial leadership, role models in each and their role in economic development. An understanding of how to build entrepreneurial mindset, skillsets, attributes and networks while on campus.

Core Teaching Tool: Simulation, Game, Industry Case Studies (Personalized for students – 16 industries to choose from), Venture Activity

Unit II: Problem & Customer Identification

Understanding and analyzing the macro-Problem and Industry perspective, technological, socio economic and urbanization trends and their implication on new opportunities. Identifying passion, identifying and defining problem using Design thinking principles. Analyzing problem and validating with the potential customer. Iterating problem-customer fit. Understanding customer segmentation, creating and validating customer personas. Competition and Industry trends mapping and assessing initial opportunity.

Core Teaching Tool: Several types of activities including Class, game, Gen AI, ‘Get out of the Building’ And Venture Activity.

Unit III: Solution design, Prototyping & Opportunity Assessment and Sizing

Understanding Customer Jobs-to-be-done and crafting innovative solution design to map to customer’s needs and create a strong value proposition. Developing Problem-solution fit in an iterative manner. Understanding prototyping and MVP. Developing a feasibility prototype with differentiating value, features and benefits. Initial testing for proof-of-concept and iterate on the prototype. Assess relative market position via competition analysis, sizing the market and assess scope and potential scale of the opportunity.

Core Teaching Tool: Venture Activity, no-code Innovation tools, Class activity

Unit IV: Business & Financial Model, Go-to-Market Plan

Introduction to Business model and types, Lean approach, 9block lean canvas model, riskiest assumptions to Business models. Importance of Build - Measure – Lean approach.

Business planning: components of Business plan- Sales plan, People plan and financial plan.
Financial Planning: Types of costs, preparing a financial plan for profitability using financial template, understanding basics of Unit economics and analyzing financial performance.

Introduction to Marketing and Sales, Selecting the Right Channel, creating digital presence, building customer acquisition strategy.

Choosing a form of business organization specific to your venture, identifying sources of funds: Debt & Equity, Map the Start-up Lifecycle to Funding Options.

Core Teaching Tool: Founder Case Studies–Sama and Securely Share; Class activity and discussions; Venture Activities

Unit V: Scale Outlook and Venture Pitch readiness

Understand and identify potential and aspiration for scale visa is your venture idea. Persuasive Story telling and its key components. Build an Investor ready pitch deck.

Core Teaching Tool: Expert talks; Cases; Class activity and discussions; Venture Activities.

Suggested Reading:

- RobertD.Hisrich,MichaelP.Peters,DeanA.Shepherd,SabyasachiSinha(2020). Entrepreneurship, McGrawHill, 11th Edition.
- Ries,E.(2011).TheLeanStartup:HowToday'sEntrepreneursUseContinuous Innovation to Create Radically Successful Businesses. Crown Business
- Osterwalder,A.,&Pigneur,Y.(2010).BusinessModelGeneration:AHandbookfor Visionaries, Game Changers, and Challengers. John Wiley & Sons.
- Simon Sinek(2011) Start with Why,PenguinBookslimited
- Brown Tim(2019) Change by Design Revised& Updated: How DesignThinking Transforms Organizations and Inspires Innovation, Harper Business
- NamitaThapar(2022)TheDolphinandtheShark:StoriesonEntrepreneurship,Penguin Books Limited
- SarasD.Sarasvathy,(2008)Effectuation:ElementsofEntrepreneurialExpertise,Elgar Publishing Ltd

Annexure – II
III B.Tech – I SEM
ENTREPRENEURSHIP - SYLLABUS



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**B.TECH III YEAR - I SEMESTER
DEPT. OF MECHANICAL ENGINEERING**

III Year I Semester	Course Code: BT24HS3102	L	T	P	C
		3	0	0	3
ENTREPRENEURSHIP (Open Elective – 1)					

COURSE OBJECTIVE:

1. To understand the concept, nature, and scope of entrepreneurship and its role in economic development.
2. To identify and evaluate business opportunities and generate innovative entrepreneurial ideas.
3. To develop skills for preparing business plans and feasibility reports for new ventures.
4. To gain knowledge about sources of finance, government policies, and institutional support for entrepreneurs.
5. To understand the challenges of starting and managing small and medium enterprises.
6. To build entrepreneurial qualities such as creativity, leadership, risk-taking, and decision-making abilities.

COURSE OUTCOMES:

1. Students will be able to explain the concept, role, and importance of entrepreneurship in economic and social development.
2. Students will be able to identify business opportunities and generate innovative and viable business ideas.
3. Students will be able to prepare basic business plans and feasibility reports for entrepreneurial ventures.
4. Students will be able to analyze sources of finance and support systems available for starting enterprises.
5. Students will be able to apply entrepreneurial skills such as leadership, problem-solving, and risk management in business situations.
6. Students will be able to understand and address challenges involved in starting, managing, and sustaining new ventures.

UNIT-I:

ENTREPRENEURIAL COMPETENCE

Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality
Characteristics of Successful Entrepreneur – Knowledge and Skills of Entrepreneur.

UNIT-II:

ENTREPRENEURIAL ENVIRONMENT

Business Environment – Role of Family and Society – Entrepreneurship Development Training and Other Support Organizational Services.

UNIT-III:

INDUSTRIAL POLICIES

Central and State Government Industrial Policies and Regulations – International Business.

UNIT-IV:

BUSINESS PLAN PREPARATION

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.

UNIT-V:

LAUNCHING OF SMALL BUSINESS

Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching – Incubation, Venture capital, IT startups.
Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units - Effective Management of small Business.

TEXT BOOKS

1. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2001.
2. S.S. Khanka, Entrepreneurial Development, S. Chand and Company Limited, New Delhi, 2001.

REFERENCES

1. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra, 2nd Edition, 2005
2. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996.
3. P. Saravanavel, Entrepreneurial Development, Ess Peekay Publishing House, Chennai - 1997.
Arya Kumar. Entrepreneurship. Pearson. 2012. Donald F. Kuratko, T. V. Rao. Entrepreneurship: A

Annexure – III
III B.Tech – II SEM
RESEARCH METHODOLOGY & IPR - SYLLABUS



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B.TECH III YEAR-II SEMESTER
Common to ECE&EEE Branches

III Year-II Semester	Course Code: BT24HS3201	L	T	P	C
		2	0	0	-
RESEARCH METHODOLOGY & IPR (AUDIT COURSE)					

COURSE OBJECTIVES:

1. To understand the knowledge on basics of research and its types.
2. To familiarize students with research design and methods, including data collection, sampling techniques, and measurement tools.
3. To impart the concept of Literature Review, Technical Reading, Attributions and Citations.
4. To know the Ethics in Engineering Research.
5. To know the concepts of Intellectual Property Rights in Engineering
6. To understand the importance of IPR protection and management for innovation, commercialization, and technology transfer in business and industry.

COURSE OUTCOMES:

1. Understand research problem formulation.
2. Analyze research related information, Follow research ethics
3. Understand that today's world is controlled by Computer, Information Technology, but tomorrow world will be ruled by ideas, concept, and creativity.
4. Understanding that when IPR would take such important place in growth of individuals & nation, it is needless to emphasize the need of information about Intellectual Property Right to be promoted among students in general & engineering in particular.
5. Understand that IPR protection provides an incentive to inventors for further research work and investment in R&D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

Unit1:

Meaning of research problem, Sources of research problem, Criteria Characteristics of a good research problem, Errors in selecting a research problem, Scope and objectives of research problem, Approaches of investigation of solutions for research problem, data collection, analysis, interpretation, Necessary instrumentations

Unit2:

Effective literature studies approaches, analyze is Plagiarism, Research ethics, Effective technical writing, how to write report, Paper Developing a Research Proposal, Format of research proposal, a

presentation and assessment by a review committee

Unit3:

Nature of Intellectual Property: Patents, Designs, Trademarks and Copyright. Process of Patenting and Development: technological research, innovation, patenting, development. International Scenario: International cooperation on Intellectual Property. Procedure for grants of patents, Patenting under PCT

Unit4:

Patent Rights: Scope of Patent Rights, Licensing and transfer of technology, Patent information and databases, Geographical Indications.

Unit5:

New Developments in IPR: Administration of Patent System. New developments in IPR; IPR of Biological Systems, Computer Software etc, Traditional knowledge Case Studies, IPR and IITs

TEXT BOOKS

1. StuartMelvilleandWayneGoddard,“Researchmethodology:anintroductionforscience& engineering students”.
2. WayneGoddardandStuartMelville,“ResearchMethodology:AnIntroduction”

REFERENCE BOOKS

1. RanjitKumar,2ndEdition,“ResearchMethodology:ASstepbyStepGuideforbeginners”
2. Halbert,“ResistingIntellectualProperty”,Taylor&FrancisLtd,2007.
3. Mayall,“IndustrialDesign”,McGrawHill,1992

Annexure – IV

II M.Tech – I SEM

RESEARCH METHODOLOGY & IPR – SYLLABUS

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M.TECH III SEMESTER

(Common to CSE,ECE,CE,&ME Branches)

III Semester	Course Code: MTD2530000	L	T	P	C
		3	0	0	3
RESEARCH METHODOLOGY AND IPR					

Course Objectives:

7. To understand the knowledge on basics of research and its types.
8. To impart the concept of Literature Review, Technical Reading, Attributions and Citations.
9. To know the Ethics in Engineering Research.
10. To know the concepts of Intellectual Property Rights in Engineering.

COURSE OUT COMES: At the end of the course, student will be able to

1. Explain the meaning of engineering research and apply to develop an appropriate framework for research studies.
2. Identify the procedure of Literature Review, Technical Reading, etc. and apply to develop research design during their project work.
3. Explain and apply the fundamentals of patent laws and drafting procedure in their research works.
4. Demonstrate the copyright laws, subject matters of copyrights, designs etc.to apply in patent filing.
5. Identify the new developments in IPR and employ the applications of computers software in writing/ filing patents in future.

Unit-I:

Meaning of research problem, Sources of research problem, Criteria Characteristics of a good research problem, Errors in selecting a research problem, Scope and objectives of research problem. Approaches of investigation of solutions for research problem, data collection, analysis, interpretation, Necessary instrumentations

Unit-II:

Effective literature studies approaches, analysis Plagiarism, Research ethics, Effective technical writing, how to write report, Paper Developing a Research Proposal, Format of research proposal, a presentation and assessment by a review committee.

Unit-III:

Nature of Intellectual Property: Patents, Designs, Trade and Copyright. Process of Patenting and Development: technological research, innovation, patenting, development. International Scenario: International cooperation on Intellectual Property. Procedure for grants of patents, Patenting under PCT.

Unit-IV:

Patent Rights: Scope of Patent Rights. Licensing and transfer of technology. Patent information and databases. Geographical Indications.

Unit-V:

New Developments in IPR: Administration of Patent System. New developments in IPR; IPR of Biological Systems, Computer Software etc. Traditional knowledge Case Studies, IPR and IITs.

TEXTBOOKS:

1. C.R.Kothari, 2nd Edition, "Research Methodology: Methods and Techniques".
2. Ranjit Kumar, 2nd Edition, "Research Methodology: A Step-by-Step Guide for beginners"

REFERENCE BOOKS:

1. Stuart Melville and Wayne Goddard, "Research methodology: an introduction for science & engineering students.
2. Wayne Goddard and Stuart Melville, "Research Methodology: An Introduction".
3. Halbert, "Resisting Intellectual Property", Taylor & Francis Ltd, 2007.
4. Mayall, "Industrial Design", McGraw Hill, 1992.
5. Niebel, "Product Design", McGraw Hill, 1974.
6. Asimov, "Introduction to Design", Prentice Hall, 1962.
7. Robert P. Merges, Peter S. Menell, Mark A. Lemley, "Intellectual Property in New Technological Age", 2016.
8. T. Ramappa, "Intellectual Property Rights Under WTO", S. Chand, 2008

