



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

BUSINESS INCUBATION – IDEA LABORATORY								
IV Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
CMBE67	Elective	L	T	P	C	CIA	SEE	Total
		-	-	4	2	40	60	100
Contact Classes: Nil	Tutorial Classes: Nil	Practical Classes: 40			Total Classes: 40			
Prerequisite: Entrepreneurship and Design Thinking								
SDGs Mapped: SDG 9 (Industry, Innovation and Infrastructure), SDG 8 (Decent Work & Economic Growth), SDG 12 (Responsible Consumption & Production)								

I. COURSE OVERVIEW:

This course provides hands-on exposure to the setup, management, and evaluation of Technology Business Incubators (TBIs). Students will learn to assess policy frameworks, analyze incubator performance, plan feasibility studies, and design financial, operational, and marketing strategies for TBIs. The course emphasizes practical skills in data analysis, visualization, and simulation using tools like MS Excel, PowerPoint, and Power BI, enabling students to understand global and Indian perspectives on business incubation.

II. OBJECTIVES:

The students will try to learn:

- The concepts, importance, and global growth of Technology Business Incubators.
- The government policies, legal frameworks, and TBI operational models in India.
- Skills required to planning, feasibility assessment, financial modeling, and incubator design.
- The tenant selection, marketing, and organizational management of incubators.
- The TBI performance using data visualization, dashboards, and comparative studies.

III. COURSE OUTCOMES:

At the end of the course students should be able to:

- CO1 Explain the key concepts, characteristics, and importance of Technology Business Incubators.
- CO2 Analyze government policies, legal frameworks, and TBI models in India for effective incubation planning.
- CO3 Apply feasibility study techniques, financial planning, and operational design to simulate a TBI setup.
- CO4 Design incubator structures, marketing strategies, and tenant selection processes using Excel and PowerPoint.
- CO5 Evaluate TBI performance by comparing metrics such as management, sponsors, focus areas, staff, and outputs.
- CO6 Assess global incubation practices and simulate TBI-led business incubation outcomes using dashboards and visualization tools.

IV. COURSE CONTENT:

EXPERIMENT – 1: INTRODUCTION TO TECHNOLOGY BUSINESS INCUBATION (TBI)

Understanding concepts, characteristics, and importance of TBIs. Overview of origin and growth of TBI movement globally and in India.

EXPERIMENT – 2: POLICY FRAMEWORK FOR TBI IN INDIA

Studying current government policies for TBI promotion. Comparative analysis of national vs global TBI initiatives using case studies.

EXPERIMENT – 3: STATUS OF TBIs IN INDIA

Analyzing current TBIs: types, number, focus areas, and performance indicators. Data compilation and visualization in Excel.

EXPERIMENT – 4: PREPARATORY AND FEASIBILITY PROCESS

Steps to plan a TBI: conducting feasibility studies, market and technical assessment, and preparing a business plan template in Excel.

EXPERIMENT – 5: KEY PLAYERS AND LEGAL INCORPORATION

Identifying stakeholders, legal structures, and incorporation procedures for a TBI. Mapping responsibilities using flowcharts in Excel/PowerPoint.

EXPERIMENT – 6: LOCATION, BUILDING, AND FACILITY DESIGN

Analyzing criteria for incubator location, physical space requirements, and service/facility design. Create layout simulations using MS Excel or PowerPoint.

EXPERIMENT – 7: INCUBATOR FINANCIAL PLANNING

Estimating investment costs, financial projections, and sources of funds for TBI setup. Preparing budget sheets and funding models in Excel.

EXPERIMENT – 8: INCUBATOR BENEFITS & VALUE CREATION

Analyzing and presenting incubator benefits to startups: mentorship, networking, funding access. Creating visual dashboards to represent benefits.

EXPERIMENT – 9: TBI ORGANIZATION AND MANAGEMENT

Designing incubator organization structure, training management teams, and roles/responsibilities mapping. Visualize hierarchy charts in Excel or PowerPoint.

EXPERIMENT – 10: MARKETING AND TENANT SELECTION

Strategies to market incubator services and select tenant startups. Simulate tenant scoring and ranking using Excel decision matrices.

EXPERIMENT – 11: TBI OPERATIONS AND EXIT POLICY

Designing operational workflows, tracking tenant progress, counseling, mentoring, and defining exit policies. Flowchart creation in Excel/PowerPoint.

EXPERIMENT – 12: TBI PERFORMANCE ASSESSMENT IN INDIA

Analyze TBIs by age, management, sponsors, focus area, staff strength, physical space, and outputs. Compare Institute-promoted vs Industry-promoted vs Sector-focused TBIs using Excel dashboards.

EXPERIMENT – 13: GOVERNMENT INITIATIVES AND R&D CONTRIBUTIONS

Track R&D input/output contribution of TBIs related to government programs. Visualize trends, grants, and patent outputs using Excel/Power BI.

EXPERIMENT – 14: GLOBAL PERSPECTIVE AND OUTCOME ASSESSMENT

Study global TBI types, classification, functions, and performance assessment. Simulate TBI-led business incubation processes and measure outcomes/achievements in Excel or Power BI dashboards.

V. SOFTWARE / TOOLS:

1. Microsoft Excel: <https://www.microsoft.com/en-us/microsoft-365/excel>
2. Google Sheets: <https://www.google.com/sheets/about/>
3. PowerPoint: <https://www.microsoft.com/en-us/microsoft-365/powerpoint>
4. Power BI: <https://powerbi.microsoft.com/>
5. Tableau: <https://www.tableau.com/>

VI. TEXTBOOKS:

1. Barringer, B. R., & Ireland, R. D., *Entrepreneurship: Successfully Launching New Ventures*, Pearson, 6th edition, 2018.
2. Taneja, S., *Technology Business Incubation in India*, Wiley India, 2017.
3. Hackett, S. M., & Dilts, D. M., *A Systematic Review of Business Incubation Research*, Journal of Technology Transfer, 2004.

VII. REFERENCE BOOKS:

1. OECD, *Science, Technology and Industry Outlook*, OECD Publishing, 2019.
2. Phan, P. H., Siegel, D. S., & Wright, M., *Science Parks and Incubators: Industry Impacts*, Research Policy, 2005.
3. Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J., *Understanding a New Generation Incubator*, Technovation, 2016.

VIII. WEB REFERENCES:

1. <https://www.startupindia.gov.in>
2. <https://www.niti.gov.in>
3. <https://www.incubationnetwork.in>