

July, 2016 - April, 2017





INTRODUCTION

- Biotechnology is on the verge of explosion, latest technology advancements like CRISPR (Cluster Regularly Interspaced Short Palindromic Repeats), 3D printing of organs, biochips, etc. has many potential applications and created immense opportunities in the field of biotechnology.
- The global biotechnology players are now considering India as a promising destination owing to its low costs, availability of man-power and a pool of research and development institutions. This has led to immense opportunities for biotech entrepreneurs in manufacturing, sourcing etc.
- Biotechnology has grown at a rate of 12% over the last five years with average exports growing between 40-60%, with a revenue generation of INR 21,185 crore in 2014-15 for India. By 2025, the Biotechnology sector will be larger than USD100 billion in India.
- The National Biotechnology Development Strategy (2015-20) aims to accelerate the pace of growth of biotechnology sector in India at par with global requirements. This strategy focuses on providing impetus to utilize knowledge and tools to the advantage of humanity, launch efforts backed by significant investment for generation of biotech products, processes and technologies, empower human resource, create a strong infrastructure for research, development and commercialization for a robust bio-economy and establish India as a world class bio-manufacturing hub.





ABOUT BIOTECHNOPRENEUR PROGRAMME

Biotechnopreneur Programme is an initiative by GSBTM in association with EDII to promote, support and facilitate the overall development of biotechnology in Gujarat. It is a 10 month weekend course designed to provide appropriate leadership and entrepreneurship skills to highly motivated individuals.

The participants will gain business insight on biotechnology entrepreneurship and will also acquire technical skill set to build career opportunities in various domains of Biotechnology. This is achieved through a combination of multidisciplinary curricula and unique pedagogy which allow utilisation of acquired skills in setting up the biotech venture.

The programme aims to contribute to sustainable development of society by providing support to biotech businesses. Through its intensive curriculum, the programme sensitizes participants about multifaceted financial, marketing and regulatory issues related to biotechnology.



PROGRAMME OVERVIEW

Opportunity Identification

IDENTIFICATION OF BIOTECH BUSINESS IDEA

- Entrepreneurship & Nation's Economy
- Entrepreneurial Psychometrics
- Essentials of Biotechnology Entrepreneurship
- Business Trends Watch
- Entrepreneurial Excellence
- Business Opportunity Identification

BUSINESS ANALYSIS

- Essentials of Biotech Business Plan
- Market Analysis
- Technology Analysis

- Financial Analysis
- Doing Biotech Business Abroad with Overseas Partners
- •Industrial Policies & Incentive Schemes

FINANCIAL MATTERS

- Essentials of Financial Management
- Options for Financing a Biotech Project
- Business Plan Appraisal

ATTAINING BUSINESS LEADERSHIP

- Drivers of Biotechnopreneurial Excellence
- Branding & Market Leadership
- Technology Scouting & Evalution

- Essentials of Technology Management
 & Transfer
- Avenues of Incubation

ASPECTS OF PROJECT MANAGEMENT & EXECUTION

Project Execution

Grounding of the Technology

- Regulation & StartUp Compliances
- Intellectual Property Rights
- Government Support Systems for Biotechnopreneur

Hand-holding and Mentoring: Regular meetings with mentors / experts / resource persons will be organised for guidance / counselling sessions and Techno-commercial Report.





CURRICULA

The course structure has been divided into five phases, which include opportunity identification, financing options and grounding of technology followed by project execution under the guidance of mentors. Finally students will come out with a techno-commercial report. With classes on Saturdays and Sundays, the course would be completed in 10 months.

COURSE OUTLINE

No.	Time (hours)	Chapters
PART-A		
Phase-1: Identification of Biotech Business Idea		
A.	2	Entrepreneurship & Nation's Economy
В.	7	Entrepreneurial Psychometrics
C.	2	Essentials of Biotechnology Entrepreneurship
D.	3	Business Trends Watch
E.	3	Entrepreneurial Excellence
F.	14	Business Opportunity Identification
Phase-2: Business Analysis		
A.	1	Essentials of Biotech Business Plan
В.	3	Market Analysis
C.	3	Technology Analysis
D.	3	Financial Analysis
E.	2	Doing Biotech Business Abroad with Overseas Partners
F.	2	Industrial policies & Incentive Schemes
Phase-3: Financial Matters/Financing a Biotech Business		
A.	3	Essentials of Financial Management
В.	2	Options for Financing A Biotech Project
C.	9	Procurement Management
D.	2	Business Plan Appraisal
Phase-4: Attaining Business Leadership		
A.	1	Drivers of Biotechnopreneurial Excellence
В.	2	Branding & Market Leadership
C.	3	Technology Scouting & Evaluation
D.	2	Essentials of Technology Management & Transfer
E.	1	Avenues of Incubation
Phase-5: Aspects of Project Management & Execution		
A.	6	Regulatory & Start-up Compliances
В.	3	Intellectual Property Rights (IPR)
C.	3	Government Support System for Biotechnopreneur
D.	18	Miscellaneous
Part-A (Total)	100	
Part-B	60	Assignment for IDB, Technology BP/ Venture and Regulation
	160	Hand-holding and Mentoring
Total	320	
Outcome		"Techno-commercial Report by each student".

The phases will cover 320 hours in all, out of which 100hrs will be devoted to class room sessions, 60 hrs for assignments and 160 hrs for mentoring & hand holding. Mentoring could be kept either at EDI or at GSBTM.

MENTOR SUPPORT

A Mentors' group of experts in various life science segments is created to support the participants of the programme in their respective projects of life sciences and to show them the right roadmap for success.

The group identifies potential innovators and start up firms to take their innovations further to the stage of commercialization by giving them roadmap including technical expertise and linkages.

Under the Biotechnopreneur Programme, each student will be provided complete handholding support from the mentors group with regard to his project and will be allocated a mentor for the entire duration of the programme.



MENTORS

- Mr. Mihir Joshi, President, Gujarat Venture Finance Limited, Ahmedabad
- Mr. Padmin Buch, Ex. Managing Director, Gujarat Industrial & Technical Consultancy Organization, Ahmedabad
- **Dr. A. N. Bhadalkar**, Sector Specialist, Gujarat State Biotechnology Mission, Gandhinagar
- Mr. Janak Sheth, Director, Century Pharmaceuticals, Baroda
- **Mr. Akash Bhavsar**, Managing Director, Skyquest Technologies Ltd., Ahmedabad
- **Mr. Ketan Patel**, Managing Director, Troikaa Pharmaceuticals, Ahmedabad
- **Dr. Mukesh Gohel**, Principal, L.M. College of Pharmacy, Ahmedabad
- Mr. D. L. Pandya, CEO, Pandya & Associates, Ahmedabad
- **Dr. R. V. Vyas**, Pl-Business Planning and Development Unit, Department of Microbiology, Anand Agriculture University, Anand
- **Dr. Snehal Bagatharia,** Sector Specialist, GSBTM, Gandhinagar
- Mrs. Anasuya Lahiry Bhadalkar, Sector Specialist, GSBTM, Gandhinagar
- **Dr. Madhvi Joshi,** Sector Specialist, GSBTM, Gandhinagar
- **Dr. Jay shankar Das**, Sector Specialist, GSBTM, Gandhinagar
- Mr. Sunil Kumar. Ahmedabad

PROGRAMME DIRECTOR

Mr. Bipin Shah, Senior Faculty, Entrepreneurship Development Institute of India, Ahmedabad

Collabrating Partners



Gujarat State Biotechnology mission was established in April, 2004 as an Autonomous Nodal Agency for the development of Biotechnology in the state of Gujarat under the aegis of Department of Science and Technology, Government of Gujarat. The Mission objectives are to promote, support and facilitate the overall development of Biotechnology in the state. To provide institute, legal financial and policy support. To facilitate networking among stakeholders at regional, national and international level. To facilitate the infrastructure development and R & D activities, to create scientific awareness, sensitization, socio ethical acceptance and adoption to the potential and application of biotechnology.



The Entrepreneurship Development Institute of India (EDII), Ahmedabad is an autonomous and not for profit institute, set up in 1983 and sponsored by apex financial institutes, the IDBI Bank Ltd., IFCI Ltd., ICICI Bank Ltd. and the State Bank of India (SBI). EDII has been spearheading entrepreneurship movement throughout the nation with a belief that entrepreneurs need not necessarily be born but can be developed through well-conceived and well-directed activities. As of now Institute has trained 639 children in its 13 summer camps on Entrepreneurial stimulation.

Knowledge Partners



Gujarat Venture Finance Limited (GVFL). GVFL has been providing venture capital to technology oriented start-ups, with the mission to delivering high returns to investors while providing financial and management support to innovative entrepreneurs set upon starting and building high growth companies. In 2005, GVFL launched its Rs 50 crore 12-year close-ended biotech venture capital fund, focusing on the development of the state biotech sector in the state.



Centre for Innovation, Incubation and Entrepreneurship (CIIE) was setup at the Indian Institute Of Management Ahmedabad (IIMA) to promote innovation and entrepreneurship in India. Experience and expertise at IIMA in the areas of management, innovation, and technology networks along with entrepreneurship provide the necessary impetus and intellectual basis for this initiative. CIIE comprises of faculty, alumni and students of IIMA, mentors and service providers from the industry who span a variety of functional areas, sectoral domains and geographies and are passionately committed to helping disruptive innovations and aspiring entrepreneurs succeed commercially.



SkyQuest Technology Consulting Pvt. Ltd. is a Global Technology Aggregator & Accelerator working in the areas of Life Sciences and Green Technologies, founded in 2006, providing Strategic Advisory services like: Business Prospecting & Facilitation, Deal Making and Technology Transfer & Commercialization.

Who should enrol?

They can be 2nd Generation Entrepreneurs, Professionals from Biotech / Pharma / Chemical Industry, Biotech Researchers, Owners of Micro, Small or Medium Enterprises, Budding Entrepreneurs, Life Science Graduates.

How to apply?

The candidates opting for the Biotechnopreneur programme should apply online at www.biotechnopreneur.in. Last date of submitting application form is 3rd July, 2016. Final selection will be based on personal interview.

Fee: ₹50000/-

Course Commencement:

Third week of July 2016

For further information, contact

Ms. Kritika Sharma & Ms. Harsha Thawani

Biotechnopreneur Cell

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