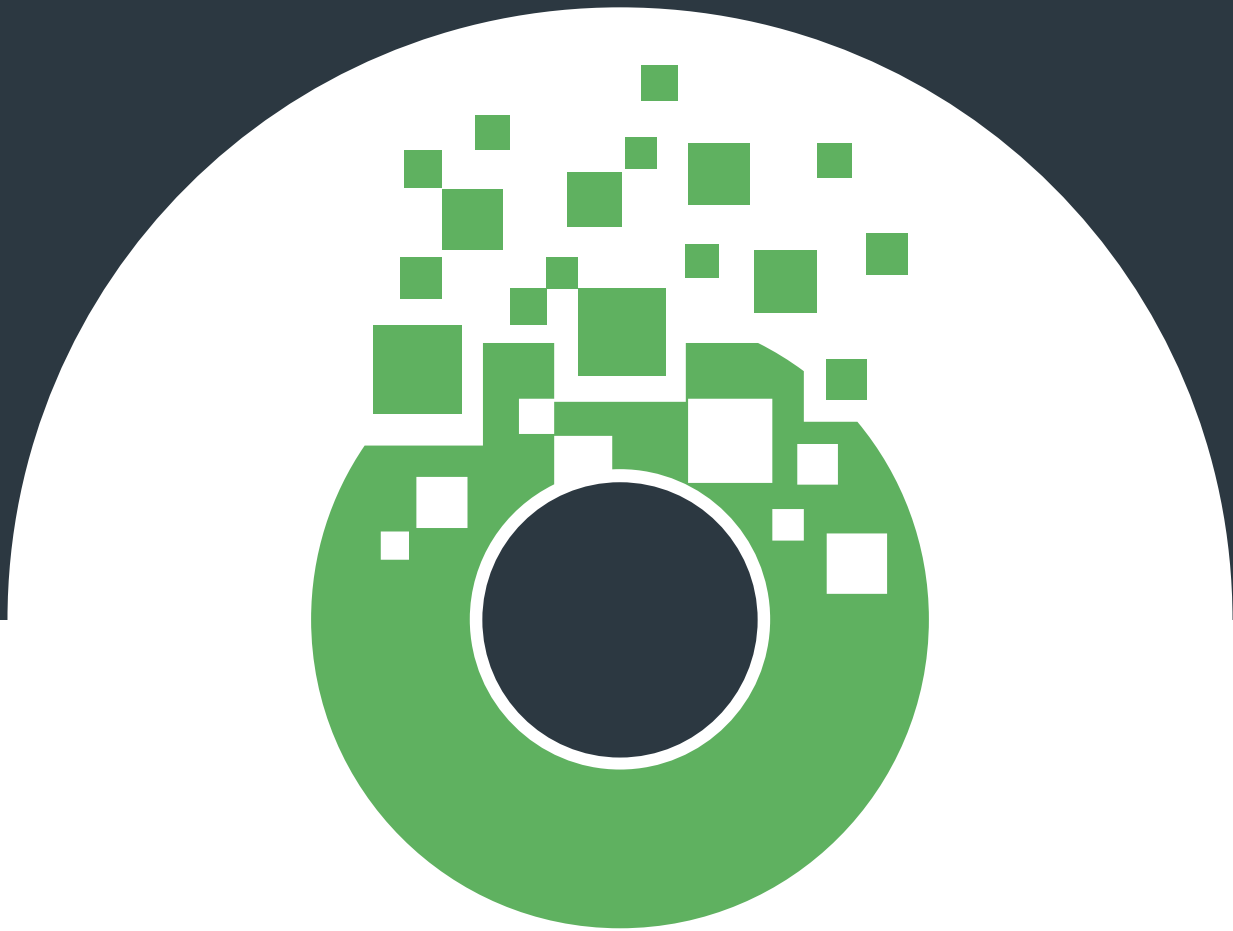
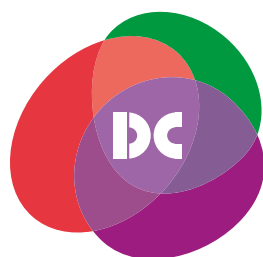


# BIODESIGN

INNOVATION COURSE



OFFERED BY DEPARTMENT OF  
**SIDC**



SRM **Innovation** and  
**Design** Centre

## Course Overview

Biodesign Innovation is a project-based, fast-paced course for undergraduate and graduate students with an interest in entrepreneurship and a desire to improve the global healthcare sector through technological innovation.

Students work in multidisciplinary teams to study and validate real-world medical needs, design novel health technology products to meet those needs, and plan for their deployment into the healthcare system. Motivated teams have the opportunity to compete for funding to continue developing their projects at the end of the course.

## Objective of Bio Design Innovation Course

This Course will articulate alternative and new innovative design propositions for the emerging bio-circular economy. The course will introduce the students from multidisciplinary backgrounds to

- Whole system thinking
- Bio mimicry principles
- Biological systems
- Bio-computational design
- Digital and bio-fabrication techniques.

It will apply these principles to designing new sustainable devices, products, services, systems and architectural propositions. There is a strong emphasis on ethical issues and on learning through making. Theoretical, global cultural and socio-environmental contexts will inform the development of your personal bio design agenda.

## Expert Contributors

A combination of the following contributors provides coaching and assistance to students:

### Core Faculty

Educators with expertise in medicine, engineering, and business, as well as a track record of successfully developing and commercializing key health solutions will offer a mix of didactic and hands-on training.

### Longitudinal Project Coaches

Experienced Bio-entrepreneurs will mentor the teams throughout the course. They will share their expertise and guide teams through the projects and provide relevant experience in health technology innovation.

### Clinical Coaches

Clinicians from associated teaching Hospitals will assist students in gaining access to a network of Clinical professionals.

### Subject Matter Experts

Specialists from the health-tech industry who will advise the teams on intellectual property, regulations, reimbursements and business models.

### Corporate and Venture Investors

At the end of each quarter, health-tech funders will assist the teams in evaluating and improving the commercial prospects of their innovations.

Students regularly use their new abilities to found start-up enterprises, create med tech jobs, and invest/consult in the life sciences industries after taking Bio design Innovation.



## Course Brief

### **Bio design Innovation: Needs finding and Concept Creation**

Multidisciplinary student teams identify unmet healthcare needs in the real world, develop novel health technologies to solve them, and plan for their implementation into healthcare.

During the **first semester**, students select and characterize an important unmet healthcare problem, validate it through primary interviews and secondary research, and then brainstorm and screen initial technology-based solutions.

In the **second semester**, teams select a lead solution and move it toward the market through prototyping, technical re-risking, strategies to address healthcare-specific requirements (regulation, reimbursement), and business planning.

Final presentations in are made to a panel of prominent health technology experts and/or investors.

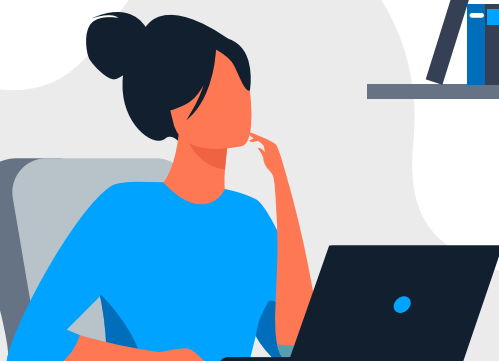
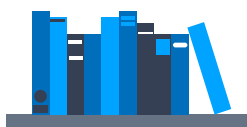
Class sessions include faculty-led instruction and case studies, coaching sessions by industry specialists, expert guest lecturers, and interactive team meetings.

# Eligibility Criteria

A student will be permitted to pursue a Minor, if and only if, he/she fulfils the following criteria:

1. Graduate or Post graduate Students
2. Must have secured a minimum of 7.0 CGPA\* at the time of admission
3. There must NOT be any standing arrears / Backlogs.
4. Must be in the active rolls of the department without any break of study or disciplinary action pending against the student
5. Must have NO outstanding fee dues

\* CGPA cut off is subject to change based on the demand and competition.



**For Details:**

[mukeshkm@srmist.edu.in](mailto:mukeshkm@srmist.edu.in)