

BIODESIGN BOOTCAMP: DEEP DIVE INTO HEALTHTECH INNOVATION WITH AN END IN MIND

Date & Time

Run 1

Monday - Friday
29 Jul 2024 - 2 Aug 2024
09:00 am - 06:00 pm

Run 2

Monday - Friday
24 Feb 2025 - 28 Feb 2025
09:00 am - 06:00 pm

Location

To be informed upon
enrolment

Course Fees

(Inclusive of GST)

Original Price
SGD 5,722.50

After SSG Subsidies
SC < 40yo & SPRs
SGD 1,716.75

SC ≥ 40yo & Enhanced
training support for SMEs
SGD 666.75

The Biodesign Bootcamp aims to equip health and medtech innovators, including healthcare professionals, researchers, product innovation engineers, strategic innovation managers and entrepreneurs with knowledge relating to multiple competencies under the [Health and Medtech Innovation Skills and Competencies](#) [whitepaper](#) as well as [Design Thinking Practice Technical Skills and Competencies](#).

This workshop will provide learners with perspectives encompassing design thinking, product development, regulatory, intellectual property, clinical trial planning, business planning and market access.

By the end of the workshop, serious health & medtech innovators will be able to internalize and apply the validated Biodesign framework of Identify, Invent and Implement towards structuring any new health and medtech innovation projects from a needs-centric and holistic view with an eye towards commercialization and adoption.

How to register?

As a self-sponsored participant, simply scan the QR Code and search for the course name! For more information, refer to our registration guide [here](#).



or click [here](#).

If your company is sponsoring your participation upfront, please email us at sbenquiry@hq.a-star.edu.sg for registration instructions.

COURSE AGENDA

Biodesign Bootcamp:
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Learning Outcomes:

By the end of the workshop, serious health & medtech innovators will be able to achieve the following enabling learning outcomes according to the relevant innovation skill and competency from the innovation training whitepaper listed below:

Product Development Competency (Basic):

- Demonstrate ability to apply the Biodesign Framework to unmet healthcare/clinical needs and design a needs specification document based on focused research and stakeholder engagement.
- Apply ideation strategies to brainstorm possible healthcare solutions and where it would meet gaps in the patient/user journey and choose and screen based on a fundamental understanding of IP, regulatory, business and reimbursement models
- Define and prepare prototyping plan and early risk assessment.
- Assess technology risks and develop functional proof-of-concept prototypes, and determine what tests are required to de-risk the project
- Collaborates with different internal stakeholders (e.g., engineers and scientists) to define product requirements, develop prototype and validate results.

Regulatory Competency (Basic)

- Conduct preliminary research to determine regulatory class of a healthcare product as medical device, drug, combination or IVD.

IP Competency (Basic)

- Explain basic IP anatomy, types of IPs, IP regulations, IP lifecycle, costing and types of IP instruments
- Apply principles of patentability and freedom to operate.
- Prepare a preliminary prior art search to evaluate healthcare innovation idea to inform feasibility

Business Planning Competency (Basic)

- Prepare a preliminary market analysis (top-down and bottom up)
- Apply basic presentation and pitching proficiency
- Has an overview of fundraising and investment landscape (i.e., public and private funding sources and options)

Clinical Trial Competency (Basic)

- Apply basics of clinical trial planning: overview, pros and cons of study designs (e.g., RCT), clinical trial ethics guidelines (e.g., HBRA/IRB), timeline of different clinical trial stages, basic statistics concept, and implication of clinical endpoints used

Market Access Competency (Basic)

- Apply principles of coding, coverage and payment

COURSE AGENDA

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Day One

0900H - 0930H	Session 1: Opening and Introduction
0930H - 1000H	Session 2: Overview of workshop
1000H - 1030H	Session 3a: Researching on Needs
1030H - 1130H	Session 3b: Filling up of DSTM worksheet
1130H - 1200H	Session 4: Need Criteria
1200H - 1300H	Lunch
1300H - 1330H	Session 5a: Concept Generation / Initial Concept Screening
1330H - 1430H	Session 5b: Brainstorm!
1430H - 1500H	Session 6: Overview of Concept Screening
1500H - 1530H	Break
1530H - 1630H	Session 6a: Concept Screening worksheets
1630H - 1700H	Session 7: Debrief

Day Two

0900H - 0930H	Session 8: Needs presentation
0930H - 1000H	Session 9: Introduction to DSTM template
1000H - 1030H	Tea Break / Class self-introduction
1030H - 1130H	Session 10: Asian Case Study
1130H - 1300H	Lunch + Session 9a: Need Research
1300H - 1330H	Session 11: Preparation for Need Specification exercise
1330H - 1430H	Session 12: Need review and development of need criteria
1430H - 1500H	Session 12a: Sharing of Need Criteria
1500H - 1530H	Tea Break
1530H - 1630H	Session 13: Concept Generation and Initial Concept Selection
1630H - 1700H	Session 14: Concept development and debrief

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Day Three

0900H - 0930H

Session 15: Review of Day 2 and Opening

0930H - 1000H

Session 16: Concept sharing on what was developed in Day 2

1000H - 1030H

Tea Break / Class Self-introduction

1030H - 1100H

Session 17a: IP Fundamentals

1100H - 1200H

Session 17b: IP in Asia

1200H - 1300H

Session 17c: IP Exercise + Lunch

1300H - 1330H

Session 18a: Regulatory Fundamentals

1330H - 1430H

Session 18b: Regulatory Affairs in Asia

1430H - 1500H

Session 18c: Regulatory Exercise + Tea Break

1500H - 1600H

Session 19a: Business models innovation in Asia

1600H - 1630H

Session 19b: Business models exercise

1630H - 1700H

Session 20: Medtech Innovation in Asia: Validating Needs and concepts

Day Four

0900H - 0930H

Session 21:
Concept Exploration
and Testing

0930H - 1000H

Session 21b:
Prototype Planning

1000H - 1030H

Tea Break / Energizer

1030H - 1100H

Session 21c:
Presentation of prototype

1100H - 1130H

Session 22a:
Reimbursement Fundamentals

1130H - 1230H

Session 22b:
Market Access to China
Lunch

1230H - 1300H

Session 23:
Final Concept Selection

1300H - 1330H

Session 24:
Recap and Next Steps

1330H - 1400H

Session 25:
R&D Strategy, Design Control
Tea Break

1400H - 1500H

Session 26:
Clinical trials fundamentals

1500H - 1530H

Session 27:
Case studies of clinical trials

1530H - 1600H

1600H - 1700H

Day Five

0900H - 0930H

Session 28:
Ops Plan and
Financial Modeling

0930H - 1030H

Session 29:
Implementation in Asia

1030H - 1100H

Session 30:
Funding landscape

1100H - 1200H

Session 31:
Preparation for
presentation
Lunch

1200H - 1300H

Session 31:
Preparation for
presentation

1300H - 1400H

Session 32:
Presentations

1400H - 1600H

Session 33:
Fireside Chat

1600H - 1700H

Session 34:
Closing



1700H - 1730H

UPCOMING WORKSHOPS

Our courses cover a wide range of topics in the HealthTech and MedTech industry and are designed for professionals looking to up-skill or re-skill themselves in the healthcare innovation space.

	Dates
Biodesign Bootcamp: Deep Dive into HealthTech Innovation with an End in Mind	Run 1: 29 Jul – 02 Aug 2024 Run 2: 24 – 28 Feb 2025
Design Thinking for Healthcare Innovation: An Overview	Run 1: 04 Sep 2024 Run 2: 15 Jan 2025
An Introduction to Product Development and Quality Management Systems for Health and MedTech Innovations	Run 1: 27 Sep 2024 Run 2: 26 Mar 2025
Business Model Innovation for Healthcare Innovations	Run 1: 27 – 29 Nov 2024
Business Implementation for Health and MedTech: Project to Market Overview	Run 1: 04 - 05 Dec 2024
Design Thinking for Healthcare Innovation: Focusing on Identifying and Inventing for the Unmet Need	Run 1: 12 – 13 Feb 2025
Health and MedTech Project Management +	Run 1: 12 Mar 2025

Contact Us For More Information :

-  www.a-star.edu.sg/sb
-  SBenquiry@hq.a-star.edu.sg



or click [here](#).