SINGAPORE BIODESIGN Wedical School

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

Run 1

Monday - Friday 28 Jul - 1 Aug 2025 9:00 am - 6:00 pm

Run 2

Monday - Friday 23 - 27 Feb 2026 9:00 am - 6:00 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 <u>Health and Medtech Innovation Skills and Competencies whitepaper</u>.

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.



or click here.

How to register? Simply scan the QR Code. Refer to

our registration guide here.

Company sponsored applicants can email us at **sbenquiry@hq.astar.edu.sg** for registration instructions.

COURSE AGENDA

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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):

- Apply the Biodesign Framework to identify unmet healthcare needs and create a needs specification document through research and stakeholder engagement.
- Brainstorm and evaluate healthcare solutions, selecting viable options based on IP, regulatory, business, and reimbursement factors.
- Define a prototyping plan, assess risks, develop proof-of-concept prototypes, and collaborate with stakeholders to 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 - 0915H	Opening and Introduction
0915H - 1000H	Biodesign Overview
1000H - 1015H	Break
1015H - 1100H	Need Statement
1100H - 1200H	Discussion on Case Studies
1200H - 1300H	Lunch
1300H - 1400H	Need Scoping Exercise
1400H - 1430H	Need Research
1430H - 1445H	Break
1445H - 1615H	Need Research Exercise
1615H - 1700H	Review & Sharing
1700H - 1800H	Q&A, Wrap Up of Day-01

Day Two

0900H - 0915H	Re-cap of Day-01
0915H - 1015H	Asian Case Study
1015H - 1030H	Break
1030H - 1200H	Need Specification & Exercise
1200H - 1300H	Lunch
1300H - 1330H	Concept Generation
1330H - 1430H	Brainstorming Exercise
1430H - 1445H	Break
1445H - 1530H	From Ideas to Concepts
1530H - 1700H	Early Prototyping & Exercise
1700H - 1800H	Q&A, Wrap up of Day-02

Day Three

0900H - 0915H	Re-cap of Day-02
0915H - 0945H	IP Basics
0945H - 1000H	Break
1000H - 1100H	IP Exercise
1100H - 1200H	IP in Asia
1200H - 1300H	Lunch
1300H - 1330H	Regulatory Fundamentals
1330H - 1430H	Regulatory Exercise
1430H - 1445H	Break
1445H - 1545H	Regulatory in Asia
1545H - 1700H	Review and Sharing
1700H - 1800H	Q&A, Wrap up for Day-03

Day Four

0900H - 0915H	Re-cap of Day-03
0915H - 1000H	Reimbursement & Business Model Basics
1000H - 1015H	Break
1015H - 1115H	Market Access to China
1115H - 1200H	Reimbursement & Business Model Exercise
1200H - 1300H	Lunch
1300H - 1330H	From Invent to Implement
1330H - 1430H	R&D Planning
1430H - 1445H	Break
1445H - 1545H	Prototyping Exercise Part 2: Plan Build Test
1545H - 1645H	Clinical Trials Basic
1645H - 1700H	Review
1600H - 1700H	Q&A, Wrap up for Day-04

Day Five

0900H - 0915H	Re-cap of Day-04
0915H - 1015H	Funding Landscape
1015H - 1030H	Break
1030H - 1130H	Clinical Trials Strategy
1130H - 1300H	Presentation Prep & Lunch
1300H - 1530H	Presentation & Feedback
1530H - 1600H	Break
1600H - 1700H	Review and Sharing
1700H - 1800H	Q&A, Closing