

# STUD-Duke-NUS Special Track Academic Pathway for: Architecture and Sustainable Design (ASD)

## JAN - APR

- Freshmore Subject (Core)
- ASD Core Courses
- Required for Special Track Students
- ASD Elective
- HASS Subject
- Strongly encouraged to take

## MAY - AUG

\* **Term 3 Electives:** Choose any two Electives

# **MCAT:** Students have to complete their MCAT by Term 6 for admissions to Duke-NUS

## SEP - DEC

Modelling & Analysis	
Physical World	
Computational Thinking for Design	
Global Humanities: Literature, Philosophy & Ethics	<b>1</b>
Modelling Uncertainty	
Social Science: Understanding Behaviour, Culture & Society	
Science & Tech for Healthcare*	
Data Driven World*	<b>3</b>
Designing Energy Systems*	
Spatial Design World*	<b>3</b>

IAP/ UPOP	Modelling Space & Systems	
	Technological World	
	Science for a Sustainable World	
	Design Thinking & Innovation	<b>2</b>

Pre-Med / Internship	
----------------------	--

IAP	Architecture Core Studio 1	
	Architecture Science & Technology	
	Introduction to Design Computation	
	Traditions (History, Theory & Culture)	<b>4</b>

Architecture Core Studio 2	
Architectural Structure & Enclosure Design	
Digital Design & Fabrication	
Modernism (History, Theory & Culture)	

Exchange / Internship	
-----------------------	--

IAP	Sustainable Design Option Studio 1	# MCAT	
	ASD Elective		
	ASD Elective		
	ASD Elective		<b>6</b>

Exchange/ Internship	
----------------------	--

Architecture Core Studio 3	
Healthcare Focused Capstone	
Architectural Energy Systems	
Building Information Modelling	

IAP	Sustainable Design Option Studio 2	
	Healthcare Focused Capstone	
	Artificial & Architectural Intelligences in Design (History, Theory & Culture)	<b>8</b>
	Instructional Design for Serious Games	

Duke-NUS Year 1 Pre-Clerkship	
-------------------------------	--

Duke-NUS Year 1 Pre-Clerkship	
-------------------------------	--

Duke-NUS Year 2 Clinical Clerkship	
------------------------------------	--

Duke-NUS Year 2 Clinical Clerkship	
------------------------------------	--

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship	
---	--

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship	
---	--

Duke-NUS Year 4 Advanced Clinical Rotations	
---	--

Duke-NUS Year 4 Advanced Clinical Rotations	
---	--



# SUTD-Duke-NUS Special Track Academic Pathway for: Computer Science and Design (CSD)

## JAN - APR

- Freshmore Subject (Core)
- CSD Core Courses
- Required for Special Track Students
- CSD Elective
- HASS Subject
- Strongly encouraged to take

IAP/ UPOP

- Modelling Space & Systems
- Technological World
- Science for a Sustainable World
- Design Thinking & Innovation **2**

IAP

- Introduction to Information Systems & Programming
- Computation Structures
- Introduction to Algorithms
- Ideal Innovations? Science Fiction and the Ethics of Technology **4**

IAP

- Machine Learning
- Computational Data Science
- CSD Elective
- HASS **6**

# MCAT

IAP

- Healthcare Focused Capstone
- Artificial Intelligence
- Instructional Design for Serious Games
- HASS **8**

## MAY - AUG

\* **Term 3 Electives:** Choose any two Electives

# **MCAT:** Students have to complete their MCAT by Term 6 for admissions to Duke-NUS

Pre-Med / Internship

- Elements of Software Construction
- Computer System Engineering
- CSD Elective
- HASS **5**

Exchange/ Internship

## SEP - DEC

- Modelling & Analysis
- Physical World
- Computational Thinking for Design
- Global Humanities: Literature, Philosophy & Ethics **1**

- Modelling Uncertainty
- Social Science: Understanding Behaviour, Culture & Society
- Science & Tech for Healthcare\*
- Designing Energy Systems\*
- Data Driven World\*
- Spatial Design World\* **3**

Exchange / Internship

- Healthcare Focused Capstone
- Global Healthcare Technologies / AI in Healthcare
- Computer Vision / User Interface Design and Implementation **7**
- HASS

Duke-NUS Year 1 Pre-Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 4 Advanced Clinical Rotations

Duke-NUS Year 4 Advanced Clinical Rotations



# SUTD-Duke-NUS Special Track Academic Pathway for: Design and Artificial Intelligence (DAI)

JAN - APR	MAY - AUG	SEP - DEC
-----------	-----------	-----------

- Freshmore Subject (Core)
- DAI Core Courses
- Required for Special Track Students
- DAI Elective
- HASS Subject
- Strongly encouraged to take

**\* Term 3 Electives:** Choose any two Electives

**# MCAT:** Students have to complete their MCAT by Term 6 for admissions to Duke-NUS

Modelling & Analysis

Physical World

Computational Thinking for Design

Global Humanities: Literature, Philosophy & Ethics **1**

IAP/ UPOP

Modelling Space & Systems
Technological World
Science for a Sustainable World
Design Thinking & Innovation <b>2</b>

Pre-Med / Internship

Modelling Uncertainty

Social Science: Understanding Behaviour, Culture & Society

Science & Tech for Healthcare*	Data Driven World*
Designing Energy Systems*	Spatial Design World* <b>3</b>

IAP

Algorithms
AI Applications in Design
Product Design Studio
Ideal Innovations? Science Fiction and the Ethics of Technology <b>4</b>

Machine Learning
Human Computer Interaction and AI
Service Design Studio
HASS <b>5</b>

Exchange / Internship

IAP

Applied Deep Learning
Systems Design Studio
DAI Elective
HASS <b>6</b>

# MCAT

Exchange/ Internship

Healthcare Focused Capstone

Global Healthcare Technologies / AI in Healthcare

Spatial Design Studio

HASS **7**

IAP

Healthcare Focused Capstone
DAI Elective
Instructional Design for Serious Games
HASS <b>8</b>

Duke-NUS Year 1 Pre-Clerkship

Duke-NUS Year 1 Pre-Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 4 Advanced Clinical Rotations

Duke-NUS Year 4 Advanced Clinical Rotations



# SUTD-Duke-NUS Special Track Academic Pathway for: Engineering Product Development (EPD)

JAN - APR		MAY - AUG		SEP - DEC	
<ul style="list-style-type: none"> <li>● Freshmore Subject (Core)</li> <li>● EPD Core Courses</li> <li>● Required for Special Track Students</li> <li>● EPD Elective</li> <li>● HASS Subject</li> <li>● Strongly encouraged to take</li> </ul>		<p>* <b>Term 3 Electives:</b> Choose any two Electives</p> <p># <b>MCAT:</b> Students have to complete their MCAT by Term 6 for admissions to Duke-NUS</p>		Modelling & Analysis Physical World Computational Thinking for Design Global Humanities: Literature, Philosophy & Ethics <b>1</b> Modelling Uncertainty Social Science: Understanding Behaviour, Culture & Society Science & Tech for Healthcare*      Data Driven World* Designing Energy Systems*      Spatial Design World* <b>3</b>	
IAP/ UPOP	Modelling Space & Systems	Pre-Med / Internship		Exchange / Internship	
	Technological World				
	Science for a Sustainable World <b>2</b>				
	Design Thinking & Innovation <b>2</b>				
IAP	Engineering Design Innovation	Systems & Control	Exchange / Internship		
	Circuits & Electronics	Fluid Mechanics / Electromagnetics & App			
	Structures & Materials	Computational & Data-Driven Engineering			
	Ideal Innovations? Science Fiction and the Ethics of Technology <b>4</b>	HASS <b>5</b>			
IAP	Topics in Biomedical & Healthcare Engineering	Exchange/ Internship		Healthcare Focused Capstone Global Healthcare Technologies / AI in Healthcare Healthcare Product Design <b>7</b> HASS	
	EPD Elective				
	EPD Elective				
	HASS <b>6</b> # MCAT				
IAP	Healthcare Focused Capstone	Duke-NUS Year 1 Pre-Clerkship		Duke-NUS Year 2 Clinical Clerkship	
	EPD Elective				
	Instructional Design for Serious Games				
	HASS <b>8</b>				
Duke-NUS Year 1 Pre-Clerkship		Duke-NUS Year 2 Clinical Clerkship		Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship	
Duke-NUS Year 2 Clinical Clerkship		Duke-NUS Year 4 Advanced Clinical Rotations			
Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship		Duke-NUS Year 4 Advanced Clinical Rotations			
Duke-NUS Year 4 Advanced Clinical Rotations		Duke-NUS Year 4 Advanced Clinical Rotations			



# SUTD-Duke-NUS Special Track Academic Pathway for: Engineering Systems and Design (ESD)

## JAN - APR

- Freshmore Subject (Core)
- ESD Core Courses
- Required for Special Track Students
- ESD Elective
- HASS Subject
- Strongly encouraged to take

IAP/ UPOP

- Modelling Space & Systems
- Technological World
- Science for a Sustainable World
- Design Thinking & Innovation **2**

IAP

- Data & Business Analytics
- Probability & Statistics
- Optimisation
- Ideal Innovations? Science Fiction and the Ethics of Technology **4**

IAP

- Simulation Modelling & Analysis
- ESD Elective
- ESD Elective
- HASS **6**

# MCAT

IAP

- Healthcare Focused Capstone
- ESD Elective
- Instructional Design for Serious Games
- HASS **8**

## MAY - AUG

\* **Term 3 Electives:** Choose any two Electives

# **MCAT:** Students have to complete their MCAT by Term 6 for admissions to Duke-NUS

Pre-Med / Internship

- Manufacturing & Service Operations
- Engineering Systems Architecture
- The Analytics Edge **5**
- HASS

Exchange/ Internship

## SEP - DEC

- Modelling & Analysis
- Physical World
- Computational Thinking for Design
- Global Humanities: Literature, Philosophy & Ethics **1**

- Modelling Uncertainty
- Social Science: Understanding Behaviour, Culture & Society
- Science & Tech for Healthcare\*
- Designing Energy Systems\*
- Data Driven World\*
- Spatial Design World\* **3**

Exchange / Internship

- Healthcare Focused Capstone
- Global Healthcare Technologies / AI in Healthcare
- ESD Elective **7**
- HASS

Duke-NUS Year 1 Pre-Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 2 Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 3 Research/Scholarship & Clinical Clerkship

Duke-NUS Year 4 Advanced Clinical Rotations

Duke-NUS Year 4 Advanced Clinical Rotations

