



# A\*STAR Talent Strategy

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# A\*STAR's Mission and Vision



## MISSION

We advance science and develop innovative technology to further economic growth and improve lives



## VISION

A global leader in science, technology and open innovation



# A\*STAR's Research Institutes

1970 - 2000	2000 - 2010	2010 - Present
National Metrology Centre (NMC)	Bio-informatics Institute (BII)	Advanced Remanufacturing and Technology Centre (ARTC)
Institute of Microelectronics (IME)	Genome Institute of Singapore (GIS)	A*STAR Skin Research Labs (A*SRL)
Singapore Institute of Manufacturing Technology (SIMTech)	Institute for Infocomm Research (I2R)	A*STAR Infectious Diseases (ID) Labs
Institute of Materials Research & Engineering (IMRE)	Singapore Institute for Clinical Sciences (SICS)	Singapore Institute for Food & Biotechnology Innovation (SIFBI)
Institute of High Performance Computing (IHPC)	Singapore Immunology Network (SigN)	Institute of Sustainability for Chemicals, Energy and Environment (ISCE2) <sup>1</sup>
Institute of Molecular & Cell Biology (IMCB)		
Bioprocessing Technology Institute (BTI)		
		<b>8 SERC Research Institutes</b> <b>9 BMRC Research Institutes</b>

<sup>1</sup> ISCE<sup>2</sup> is a re-organisation of A\*STAR's former Institute of Chemical and Engineering Sciences, which was established in the 2000s

# Core BMRC capability



BMRC manages 9 Research Institutes which carry out a spectrum of R&D activities, ranging across knowledge creation, enabling capabilities, large scale programmes, and industry-oriented activities.

**IMCB**



**Molecular & Cell  
Biology,  
Neurometabolism**

**GIS**



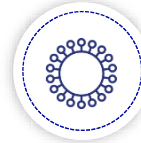
**Genomics &  
other "omics"**

**SIgN**



**Immunology**

**A\*IDL**



**Infectious  
Diseases**

**BII**



**Bioinformatics**

**A\*SRL**



**Skin Health**

**SIFBI**



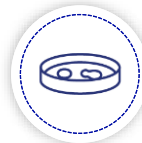
**Food Sciences**

**SICS**



**Life Course Human  
Potential Research**

**BTI**

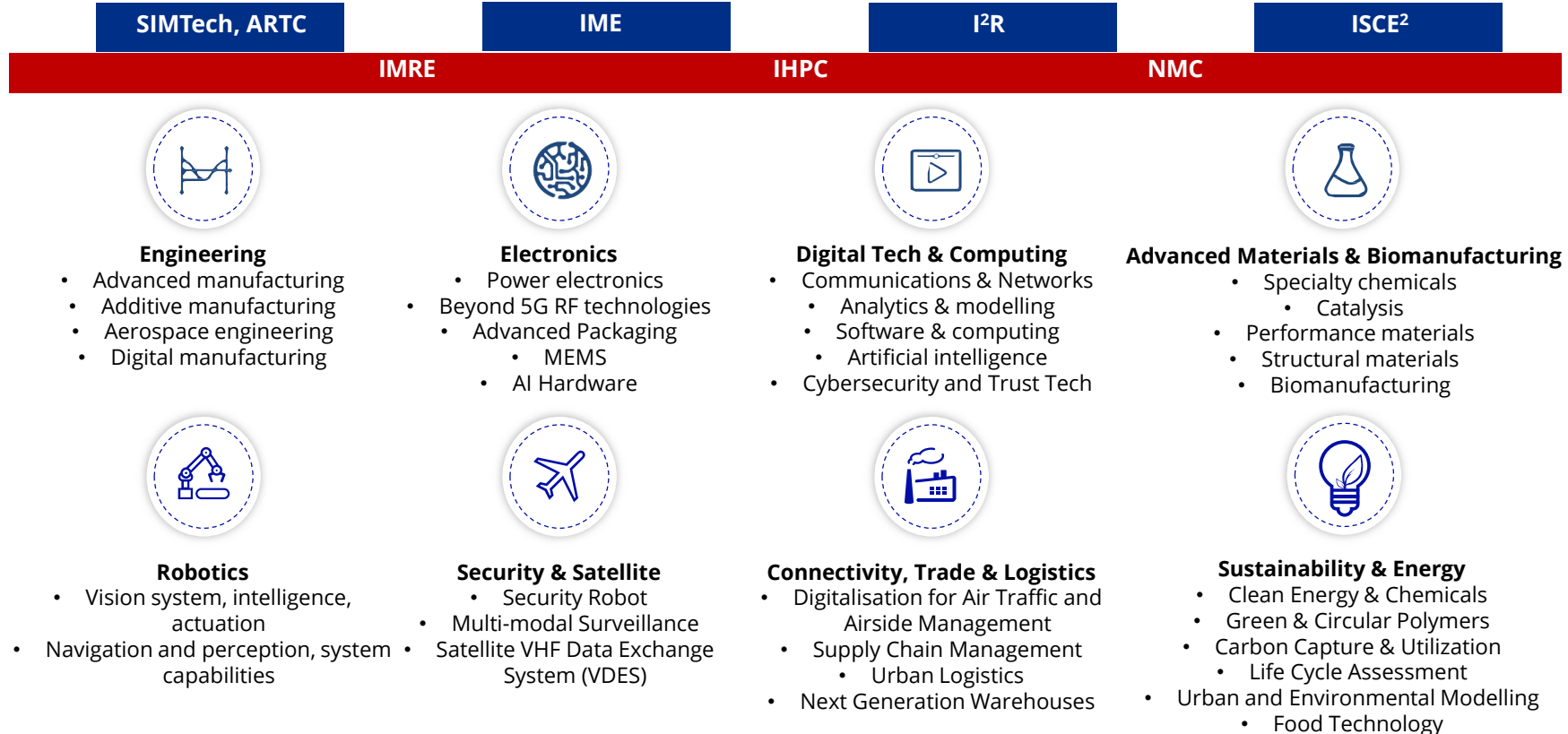


**Bioprocessing &  
Biomanufacturing**

# Core SERC capabilities

SERC manages 8 Research Institutes which carry out a spectrum of R&D activities, ranging across knowledge creation, enabling capabilities, large scale programmes, and industry-oriented activities.

- Sector RIs
- Enabling RIs



# A\*STAR Horizontal Technology Coordinating Offices (HTCOs)



Integrate multi-disciplinary capabilities across RIs to address cross-cutting national priorities.

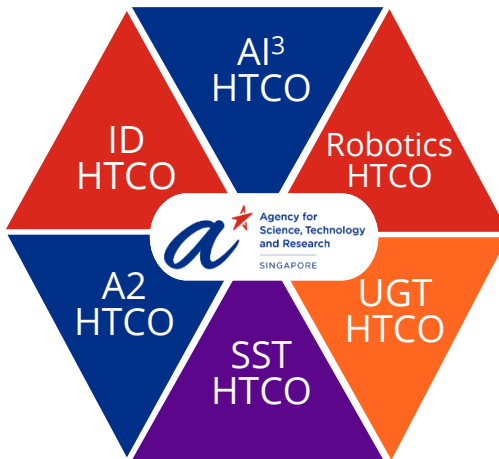
**Artificial Intelligence, Analytics & Informatics:** Develop and deploy solutions to support Singapore's national **AI strategy** projects.

**Robotics:**

Develop solutions for application in **industrial collaborative robots**, automation for **urban farming**, robotics for augmentation of **healthcare** workers and automation of **diagnostics, construction** robotics and **safety and security** robots

**Urban and Green Technology:**

Focus on **CCUS, energy efficiency/ electrification, infrastructure, waste valorization** and **sustainable manufacturing technologies** to mitigate climate change effects



**Social Sciences & Technology:** Enhancing A\*STAR's capabilities in **computational social & behavioural sciences** to address people-centric issues

**Infectious Diseases:**

Drive **translational ID research** in A\*STAR to support Singapore's **epidemic preparedness** and deliver **impactful economic outcomes**

**Agritech & Aquaculture:**

Advance capabilities and solutions to **grow the urban agritech and tropical aquaculture sector**

# Strengthening International Linkages

## SIPGA

Singapore International  
Pre-Graduate Award

**2 to 6-month research  
attachments**

at A\*STAR Research  
Institutes for students in the  
later years of their  
**Bachelor's or Master's**  
programmes

## ARAP

A\*STAR Research  
Attachment Programme

**1 to 2-year PhD  
research opportunities**

at A\*STAR Research  
Institutes under joint  
supervision of A\*STAR  
scientists and faculty from  
overseas universities

## SINGA

Singapore International  
Graduate Award

**4-year PhD programme**

at A\*STAR Research  
Institutes, in partnership  
with Singapore universities:  
**NTU:** Nanyang Technological University  
**NUS:** National University of Singapore  
**SMU:** Singapore Management University  
**SUTD:** Singapore University of  
Technology & Design

**ROBUST AND DIVERSE TALENT POOL**

Since 2007, we have **>2,100** international students attached to A\*STAR

# Singapore International Pre-Graduate Award (SIPGA)

## Eligibility



Open to 3<sup>rd</sup> & 4<sup>th</sup> Year undergraduate and Master's students from overseas universities



Attachment duration of **2 - 6 months** at A\*STAR Research Institutes



**Obtained/ on track to a Second-Class Upper Honours** (or equivalent) for Bachelor's studies

Applications are processed on a rolling basis year round

## Terms of Award



Monthly stipend of **S\$2,000**

*Terms of Award accurate as of Nov 2023*



[www.a-star.edu.sg/SIPGA](http://www.a-star.edu.sg/SIPGA)

More than 850 SIPGA graduates from over 40 countries since 2008





# Singapore International Pre-Graduate Award (SIPGA)

## How to Apply

### Step 1: View SIPGA Project List for Project Selection

View the SIPGA Project List to identify the project(s) you wish to apply for.

### Step 2: Prepare Supporting Documents

Copy of passport, academic transcripts, CV

### Step 3: Submit Online Application

Students may apply for up to three (3) projects concurrently.

### Step 4: Online Interview

Shortlisted applicants would be contacted by the A\*STAR researcher for an online interview within 2-3 weeks from the date of application.

### Step 5: Await Award Outcome

Successful applicants will be notified within 2 months from the date of application.

### Questions?

Contact [SIPGA\\_Office@hq.a-star.edu.sg](mailto:SIPGA_Office@hq.a-star.edu.sg)



[www.a-star.edu.sg/SIPGA](http://www.a-star.edu.sg/SIPGA)

More than 1000 SIPGA graduates from over 40 countries since 2008

# A\*STAR Research Attachment Programme (ARAP)

**Facilitates collaboration** between A\*STAR and overseas universities

Supports **international PhD students** in overseas universities to undertake **1 - 2 years** of research at an A\*STAR research institute under the **joint supervision** of an A\*STAR researcher and faculty member of home university

PhD student remains matriculated at home university while physically based in an A\*STAR RI throughout their attachment

PhD degree will be conferred by the home university



[www.a-star.edu.sg/ARAP](http://www.a-star.edu.sg/ARAP)



**More than 300 students from over 40 countries since 2009**

# A\*STAR Research Attachment Programme (ARAP)

## Eligibility



Open to all international students



Bachelor's degree with at least a **Second-Class (Upper) Honours**



Preferably prior research experience



Strong academic recommendations

## \*Terms of Award



Monthly stipend of **S\$3,200**



Monthly housing subsidy of **S\$300**



One-time airfare grant of **S\$1,500**



One-time settling-in allowance of **S\$1,000**



One-time IT allowance of **S\$800**



Medical insurance



Conference allowance

## Annual Nomination Cycles

**15 May**

**30 November**



# Overview of Nomination Process



## Collaboration

between A\*STAR supervisor and university faculty on joint project

## Draft Proposal

prepared by A\*STAR supervisor and university supervisor for joint project

## Seek Approval

on the proposed project from A\*STAR RI and university (if applicable)

## Recruit Students

to apply for approved project

## Shortlist Students

for project by A\*STAR supervisor and university faculty

## Nominate Students

for the ARAP award by completing nomination form and submitting to A\*GA

**Note:** Nomination should be at least **4-5 months in advance** of intended attachment start date

# Singapore International Graduate Award (SINGA)



- ✓ **Bond-free 4-year PhD scholarship** for international BSc and MSc students in Singapore
- ✓ Pursue PhD in **science, engineering, biomedicine and social sciences related to machine learning and artificial intelligence**
- ✓ Perform cutting-edge research under distinguished researchers in **A\*STAR, NTU, NUS, SUTD** or **SMU** with degree being conferred by the university





# Singapore International Graduate Award (SINGA)

## Eligibility



Open to all international students



Excellent academic performance



Strong passion for research



Proficient in written and spoken English



Strong academic recommendations

## \*Terms of Award



Monthly stipend of S\$2,700  
S\$3,200 after passing the Qualifying Examination



Full tuition fees coverage



One-time airfare grant of S\$1,500



One-time settling-in allowance of S\$1,000  
and one-time IT allowance of S\$1,500



Medical insurance



Conference allowances



(only for awardees staying out of campus)  
Monthly housing subsidy of S\$300

## Application Deadlines

August intake : **1 December of preceding year**

January intake : **1 June of preceding year (for NTU only)**

*The rates will apply to awardees who join from the January 2024 intake onwards.*

*\*All rates/allowances are subject to adjustments by A\*STAR from time to time.*



CREATING GROWTH, ENHANCING LIVES



# THANK YOU

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[www.a-star.edu.sg](http://www.a-star.edu.sg)