

Research Experience (REx)

Briefing for Students: 28 May 2024, 4pm

FOS, FASS, NUS College, SOC Upgraded UROP courses Biz

Upgraded Independent Study Courses (ISC)

CDE

CDE2605R: Undergraduate Research Experience (UREx)

Office of the Provost National University of Singapore

Briefing Agenda (May 2024)

REx as <u>Upgraded</u> Courses

 FOS, FASS, NUS College, SOC
 Biz

 Upgraded UROP courses:
 Upgraded Independent Study Courses (ISC):

 UROP+REX
 ISC+REX

REx as <u>New</u> Course

CDE

CDE2605R: Undergraduate Research Experience (UREx)

- Overview of REx Course Upgrade
- Administrative matters
- Assessment matters

Upgraded Course

FOS, FASS, NUS College, SOC

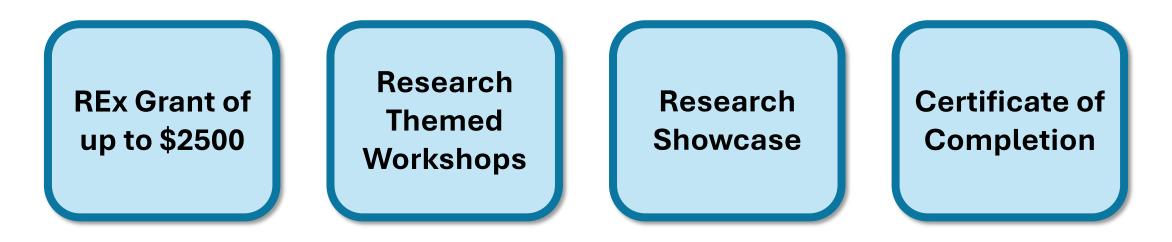
Upgraded UROP courses: UROP+REx

Biz

Upgraded Independent Study Courses (ISC): ISC+REx



REx aims to provide students with a **holistic research experience** through participation in research themed workshops, showcasing their work at conferences or symposiums, and collaborating with undergraduate researchers from other disciplines in NUS.



REx Grant

Research

Showcase

All REx Fellows have access to a **\$2500 grant** which can be used to support expenses related to their research project. REx Fellows have **until their last semester in NUS** to access the grant.

The default process of accessing the grant is by **reimbursement** whereby students make any necessary purchases and claim the amount by submitting a reimbursement form attached with receipts.

Supervisors may also make the upfront payment for their students if they wish to, and the amount can be claimed from the REx grant.

REx Grant

ResearchCertiShowcaseCom

Certificate of Completion

All REx Fellows have access to a **\$2500 grant** which can be used to support expenses related to their research project.

How do REx Fellows claim from the grant?

Completed reimbursements forms with all relevant receipts are to be submitted to **NUS REx** at <u>pvobox66@nus.edu.sg</u> as a single PDF file. REx Fellows may submit more than one reimbursement form if they need to.

Reimbursement forms can be downloaded from <u>NUS</u> <u>Undergraduate Research</u> website.

REx Grant

Reimbursement procedures

- 1) REx Fellows submit reimbursement forms with all relevant receipts to NUS REx at pvobox66@nus.edu.sg for approval.
- 2) Upon approval by PVO, grant monies are disbursed to students according to **respective departments' disbursement protocols** (i.e. **RFP forms**)

REx Workshops

Grant

Workshops Research Showcase Certificate of Completion

REx Fellows are to attend a minimum of 5 REx workshops over 12 months.

This should comprise of two core workshops (Ethics in Research and Research Methodologies) and three elective workshops of choice.

All REx workshops are conducted in person at either Central Library or Medicine+Science Library, unless otherwise stated.

Workshops are scheduled between Week 6 to Week 11 of Semesters 1 and 2. Schedule will be announced by Week -1 of each semester.

Current suite of REx workshops

Core

Ethics in Research Research Methodologies

Elective

Data Storytelling Poster Presentation Research Communications Storytelling for Impactful Communication Sharing Your Research: Making the Pitch work for you Artificial Intelligence in Research Careers in Research Panel Discussion Research Oriented Writing

Ex Worl	kshops				Grant	Research Showcase Completio
		REx Workshop Schedule (Semester	2 AY23/24)			
REx Workshop	Instructor(s)	Date(s)	Time	Location	Remarks	
Core (Mandatory for all REx F	Fellows)					
Ethics in Research	Dr Rafi Rashid	Part 1: 13 March 2024 Part 2: 27 March 2024			REx Fellows are required to attend <u>both</u> Part 1 and Part 2 of Ethics in Research workshop.	Example of workshop schedule
Research Methodologies	Dr Magdeline Ng Mr Richard Ho A/P Natalie Pang	Option 1: 21 February 2024 (STEM) Option 2: 4 March 2024 (HSS)	5.30-7.30pm	DS Lab @ Central Library	REx Fellows are required to attend <u>only</u> <u>one</u> Research Methodologies workshop (Option 1 – STEM or Option 2 – HSS)	in Semester 2 AY2324
Elective (REx Fellows are to a	ttend a minimum of 3 elective REx v	vorkshops)			·	
Research Communications	Ms Brenda Yuen Dr Lee Ming Cherk	19 February 2024	4-6pm			REx Fellows are to attend
Data Storytelling	Darrel (Kontinentalist) Gwyneth (Kontinentalist)	5 March 2024	2-4pm	_		minimum of five REx
Poster Presentation	Dr Siti Nur Fairuz Sheikh Ismail	20 March 2024	12-2pm		work	workshops over 12 month
Research Oriented Writing	Dr Tait Bergstrom	26 March 2024	10am-12pm	10am-12pm DS Lab @ Central 4-6pm Library 6-8pm Image: Contral of the second sec		Workshops are scheduled
Panel Discussion	Ms Priyam Sinha	6 March 2024	4-6pm			between Week 6 to Week 1 of Semesters 1 and 2.
Artificial Intelligence (AI) in Research	A/P Tan Wee Kek Dr Lek Hsiang Hui	2 April 2024	6-8pm			
Careers in Research	Dr Benjamin Tan (CFG) Dr Lakshmi Ramachandran (CFG)	5 April 2024	4-6pm			

Research Showcase

UROP+REx Conference

Participating in Researcher Unbound Plus hosted by PVO-UGRC and NUS Libraries

As part of our objective to encourage students to take ownership of their work, REx Fellows are

required to **showcase their research** via either one of the following options:

Grant

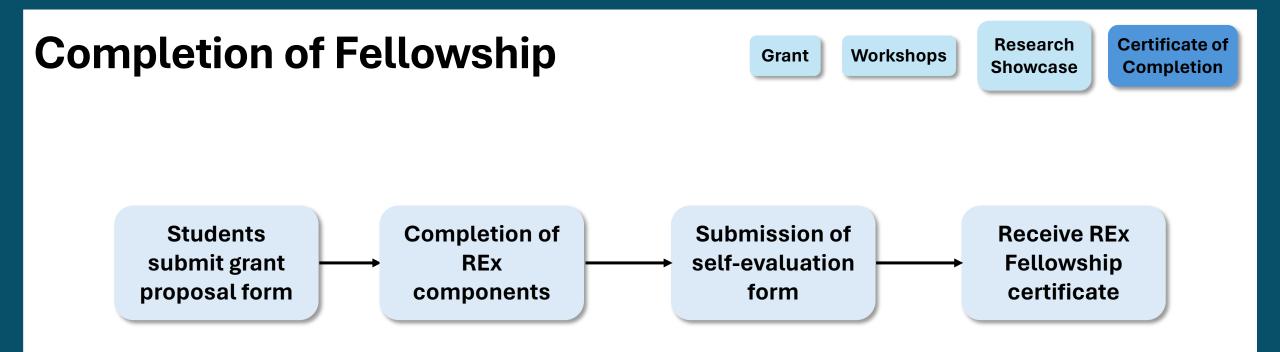
Submission of a research deliverable in relation to UROP project

* UROP or ISC final report submitted to department for grading cannot be double dipped to be counted as research deliverable.

Completion of Fellowship

Official e-Certificate of Completion will be issued via Accredible when REx Fellows complete all components of the course upgrade.

- Students should complete the following programme components within 12 months upon onboarded as a REx Fellow:
 - 1. Attend at least five REx workshops (including Research Methodologies and Ethics in Research)
 - Workshops are scheduled between Week 6 and Week 11 of Semester 1 and 2
 - 2. Either one of the following research showcase options:
 - a) Presentation of research work during annual UROP+REx Conference
 - b) Participation in RU+ workshops hosted in collaboration with NUS Libraries
 - c) Submission of a deliverable of chosen format in relation to UROP project (e.g. research poster, slide deck presented at a local or international conference or executive summary)
- Self-Evaluation forms are to be submitted to PVO upon completion of all REx components



Completion Checklist (for students)

- ✓ Grant Proposal form
- ✓ Attendance of five REx workshops
- ✓ Research Showcase
- ✓ Reimbursement form (if applicable)
- ✓ Self-evaluation form

All forms relevant to REx can be downloaded from NUS Undergraduate Research website

Eligibility and Application Timelines

- Those who wish to apply for REx must have an **existing UROP or ISC**, or about to start one.
 - For students who are about to apply for UROP or ISC, it is **highly encouraged to apply for REx concurrently.**
 - Students who have completed one semester of their 8 Unit UROP are eligible to apply for REx as well.
- Grant calls will be announced by PVO twice a year, each call concurrent with respective faculty's UROP or ISC application timelines.

How to apply for REx?

Download the **REx Grant Proposal Form** for respective faculty from the **NUS Undergraduate Research website** and email the completed form to NUS REx at <u>pvobox66@nus.edu.sg</u>.

Application Deadline: Week 3 of Semester 1 or 2 of the academic year

Students, supervisors and department admins will be informed of application outcomes via email by Week 5.

Eligibility and Application Timelines (UROP+REx, ISC+REx)

	Eligibility for LIDOD or ISC*	Application Timelines	
	Eligibility for UROP or ISC*	UROP or ISC	UROP+REx, ISC+REx
FOS	Completed at least one semester of study and a minimum GPA of 3.0	Refer to <u>FOS UROP</u> website	
FASS	Must have declared a Major, completed a minimum of 24 units of that major and have a GPA of at least 3.2	Refer to <u>FASS UROP</u> <u>information page</u> on Student Portal	
SOC	Have at least 60 units at the point of applying (including units enrolled during the project selection semester) and a minimum GPA of 3.8	Refer to <u>SOC UROP</u> website	Concurrent with UROP or ISC application timelines of each faculty until Week 3 of
NUS College	Students may enquire Ms Rohayu regarding NUSC UROP eligibility and application timelines		Semester 1 and 2.
Blz	Refer to department guidelines for ISC courses offered by Blz	By Week 2 of Semester 1 or 2 of the academic year. Refer to <u>Biz ISC</u> <u>page.</u>	

Administrative Matters

Upon approval of grant proposal form and onboarded as REx Fellows:

- Allocation of R-coded course codes on EduRec
 - FOS, FASS, BIz: Replacement of non-R coded course codes with R-coded UROP or ISC course codes
 - SOC : Allocation of rider R-coded UROP course code CS3209R
 - **NUSC**: Automatic allocation of R-coded course codes when students apply for UROP
- Allocation of R-coded UROP/ISC CANVAS pages (if applicable)
- Allocation of REx CANVAS page (REX1000) to REx Fellows (by Week 5)

(REx Fellows have access to REX1000 until graduation unless withdraw from programme)

- REx workshops sign ups for each semester
 - Class list will be uploaded on REX1000

Assessment

For matters of **UROP and ISC assessments** (submissions, timelines and other instructions), **refer to respective department guidelines**. UROP and ISC assessments are monitored by respective departments.

REx components of the course upgrade are monitored by PVO and are **not graded**. Overall grade of UROP and ISC upgraded courses are **not affected** by REx components.

*REx Fellows are **not allowed** to reuse their UROP or ISC report as research showcase submission.



	UROP+REx, ISC+REx
Course units	4 units or 8 units
	*REx upgrade does not carry additional course credits.
	REx components that REx Fellows need to complete alongside their UROP/ISC project.
Format	These include:
	(1) Attending a minimum of 5 REx workshop
	(2) Completion of research showcase
	No additional assessments in addition to UROP/ISC assessments.
Assessment	Upon completion of all REx components and submission of REx Fellows' Self Evaluation Form,
	students will be issued an e-Certificate of Completion via Accredible.
	No additional role by UROP/ISC supervisors if students choose to upgrade their course with REx.
Supervisor's role	Supervisors will be required to endorse student's grant application forms and reimbursement claims.
	Students may also seek guidance from supervisors on relevant matters such as their research showcase, usage of grant monies ect.
Grant monies	Up to \$2,500 per REx Fellow . Accessible until graduation.

For CDE students who wish to take an undergraduate research course under their department and benefit from the REx.

CDE UROP (EG2605) is not available to be upgraded with REx. Students who wish to benefit from the REx programme while doing a research project under CDE can opt to take UREx.

<u>New</u> Course

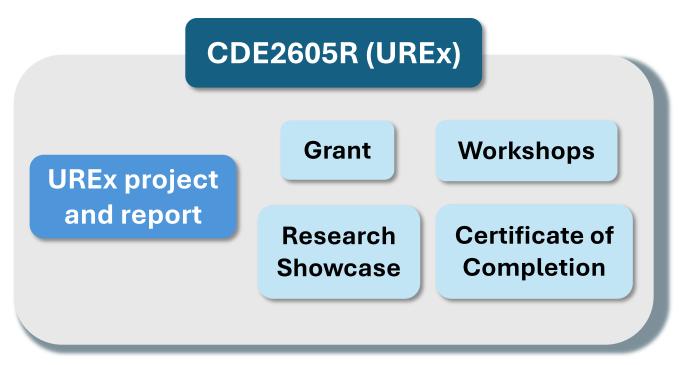
CDE

CDE2605R: Undergraduate Research Experience (UREx)

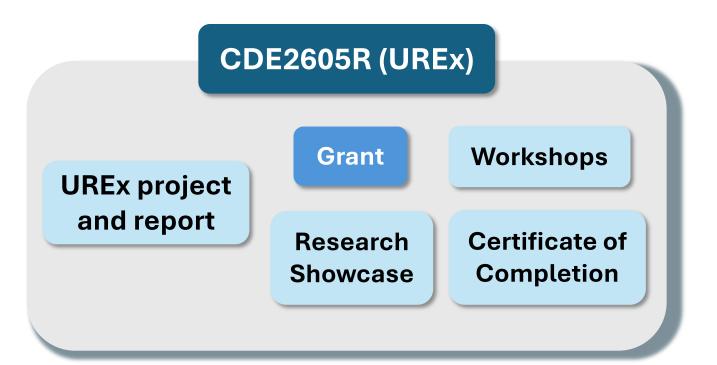
A new undergraduate research course for CDE students to be launched in August 2024 which incorporates REx components including access to grant monies and researchoriented workshops.

Unlike REx course upgrades with other partner faculties, **UREx is a standalone, 4-Unit course** where CDE REx Fellows carry out **student-proposed projects** of their choice under supervision of a faculty member.

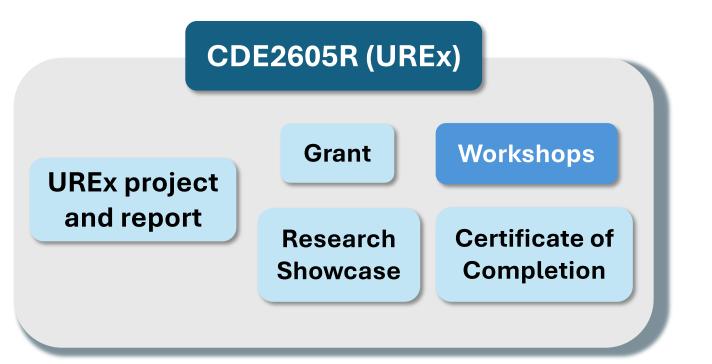
CDE UROP (EG2605) is offered alongside UREx (CDE2605R)and cannot be upgraded with REx. Students who wish to benefit from the REx programme while doing a research project under CDE can opt to take UREx.



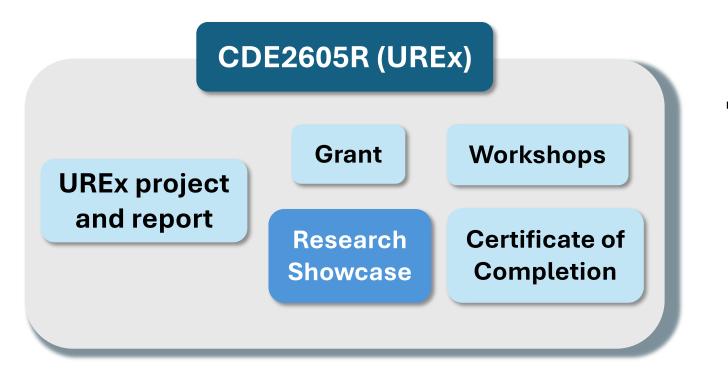
- 4 Units course. Students have up to one year to complete UREx project and REx components.
- Offered in Semester 1 and 2 only (not offered in special terms)
- UREx projects are student-proposed.
- Individual or Group projects
 - Max of 4 members for group projects
- UREx reports are submitted to departments via Enhancement portal for grading



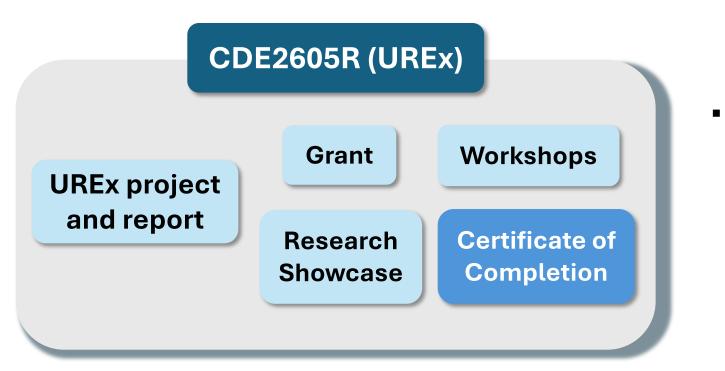
- Research grants available:
 - \$2500 for individual project
 - o \$5000 per group project
- CDE REx Fellows have access to grant monies **until graduation**
- Reimbursement forms are submitted for approval via Enhancement Portal



- Attend a minimum of 5 REx workshops within 2 semesters, including Ethics in Research and Research Methodologies
- Same suite of REx workshops for all REx Fellows



- Only 1 default research showcase format – executive summary
 - A 1-2 page summary of UREx project intended to laymen audience
 - To be submitted via
 Enhancement Portal within 2 semesters of starting UREx



 An e-certificate of completion will be issued to CDE REx Fellows via Accredible upon satisfactory completion of UREx

Eligibility and Application Timelines (UREx)

Faculty	Eligibility for UREx	Semester 1	Semester 2
CDE	 Must be a registered student of CDE. Have at least Stage 2 standing. Have at least two regular semesters of study remaining prior to graduation. 	TBC	TBC

How do CDE students apply for UREx?

Download **UREx Grant Proposal form** from CDE Enhancement Programme website and submit completed form via **Enhancement Portal**.

For group projects, only one person will need to submit the online application form.

Administrative Matters

By CDE

- Enhancement Portal
 - Submission of grant proposal and reimbursement forms
 - Submission of final UREx report and executive summary
- Grant proposal forms are routed to supervisors for approval first before routed to PVO
- Final UREx report are graded by supervisors

By PVO

- Onboarding to REX1000 CANVAS page
- Liasing with students to sign up for REx workshops
- Review and approve reimbursement claims
- Monitoring completion of REx components (workshops and executive summary)

Assessment

REx Fellows will have to fulfill the following within **2** semesters to receive CS/CU grade:

- Submission of UREx report
- Completion of **REx components**:
 - Attendance of at least 5 REx workshops (including Ethics in Research and Research Methodologies)
 - Submission of an **executive summary** in relation to UREx project

For group projects, the above are to be completed individually by each group member.

Assessment

Example of assessment timeline

Further details will be announced to CDE students before August 2024

Start of UREx	Completion by	Deadline to upload <u>UREx</u> report and complete <u>REx</u> components	Grading
12 August 2024	End of Semester 1 AY2425	22 Nov 2024	You will receive 'CS/CU' grade at the end of Semester 1 of AY2024/25
	End of Semester 2 AY2425	25 Apr 2025	You will receive: · 'IP' grade at the end of Semester 1 of AY2024/25 · 'CS/CU' grade at the end of Semester 2 of AY2024/25

Comparison of undergraduate research courses in CDE

UREx course guidelines will be made available to staff and students soon.

	UROP	IW	UREX (New!)	
	EG2605 (4 Units)	EG2606A (2 Units) EG2606B (4 Units)	CDE2605R (4 Units)	
Course Code and Units	Offered in Sem 1, Sem 2 and Special Sem 1	Offered in Sem 1, Sem 1 and Special Term	Offered in Sem 1 and Sem 2 only	
Minimum number of commitment hours	130 hours	65 hours (2 Units) 130 hours (4 Units)	130 hours	
Faculty or Student Initiated	Academic Staff- Initiated	Student-Initiated		
Individual or		Individual or Group (max of 4 members in a group)		
Group Projects	Individual	Students are required to source for their own supervisor		
Application Procedure	Select a project on Enhancement Portal	Submission of project proposal via Enhancement Portal	Submission of research grant proposal form via Enhancement Portal	
			\$2500 (individual projects)	
Grant	N.A.	N.A.	\$5000 (group projects)	
Project Duration	1 or 2 semesters	1 semester or both parts of Special Term	1 or 2 semesters	
Assessment	Submission of	Submission of IW	Submission of UREX report	
Assessment	UROP report	report	Completion of BEX components*	
Grading		CS/CU		

*REx Components

 a) Attendance of at least five REX workshops (including Ethics in Research and Research Methodologies) and b) Submission of executive summary in relation to UREX project.

CDE2605R: Undergraduate Research Experience (UREx)

Application deadlines for AY2425

	Semester 1	Semester 2
UROP+REx FOS, FASS, NUSC, SOC	By Week 3 30 August 2024	By Week 3 31 Jan 2024
ISC+REx	By Week 3	By Week 3
Biz	30 August 2024	31 Jan 2024
CDE2605R: UREx	TBC	TBC

Reminders for applications and REx workshop schedule will be announced by PVO from July 2024 and December 2024 for Sem 1 and 2 application windows respectively.

Upcoming Briefings for June and July 2024

REx Course Upgrade

June 2024 26 June 2024 (Wednesday) Staff: 1.30pm-2.30pm Students: 3-4pm

July 2024

25 July 2024 (Thursday)

Staff: 2-3pm

Students: 4.30-5.30pm

UREx

To be confirmed

UNDERGRADUATE RESEARCH OPPORTUNITIES PROGRAMME RESEARCH EXPERIENCE+

REx+

Contact Details

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