# CDE2605R: Undergraduate Research Experience (UREx)

**Briefing on UREx** 

College of Design and Engineering & Office of the Provost National University of Singapore

# **Briefing Agenda**

- What is UREx?
  - Eligibility, application procedures and timelines
  - Grant
  - Deliverables
- Withdrawal from UREx
- Comparing UROP to UREx
- Contact details

# What is UREx?

- CDE2605R Undergraduate Research Experience (UREx)
- Course Units: 4
- **Duration**: Up to two semesters (regular)
- Credits from UREx can be counted towards major internship requirements
- UREx projects are student-proposed
- Individual or group projects (max of 4 members per group)

UREx is offered during regular semesters only!

CDE UROP is offered alongside UREx 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.

# **Eligibility and Other Conditions**

- Must be a registered CDE student
- Have at least stage 2 standing (Note: Polytechnic diploma holders are eligible to enrol for UREx as early as Stage 1 standing)
- Have at least two regular semesters of study on campus remaining prior to graduation
- UREx can only be taken once
- Students can take both UROP and UREx but not concurrently
- UREx can be taken concurrently with FYP but projects (scope of work) must be significantly different
- Main supervisor must be a full-time academic staff from CDE (including those with joint appointments with CDE). Co-supervisors need not be from CDE

### **Application Procedure and Timeline**

- Completed and endorsed REx Fellows' Grant Application Form to be uploaded on CDE Enhancement Programmes Portal
- For group project, only the **group leader** needs to submit application
- Applications will be routed to supervisors for approval. Once approved, applications will be routed to PVO for final review

Activity	Semester 1	Semester 2
Submission of REx Fellows' Grant Application Form via the CDE Enhancement Programmes Portal	Week -2 to Week 1	Week -3 to Week 1
Enrolment of CDE2605R in EduRec by <b>Dean's Office</b> Onboarding to REx CANVAS page (REX1000)	Week 4	Week 4

# Grant

For UREx projects, REx Fellows can claim up to:

- Individual projects: \$2500
- Group projects: **\$5000** per project

# REx Fellows will have access to grant monies until their final semester in NUS

# Grant

Can be used to reimburse the costs of the following items for the associated UREx project:

- Consumables, lab supplies, use of research facilities and equipment
- License fees of software
- Registration fees for conferences, seminars or workshops
- Project deliverables such as costs of printing posters, travel and transportation costs
- Books, journal articles, subscription to journals which are NOT available in the university's libraries
- Fees associated with publication of manuscripts in journals

Following items are NOT allowed to be claimed from the research grant:

- Entertainment and refreshment
- Personal expenses not related to the UREx project
- Equipment or devices not related to the UREx project

# **Claim Procedure**

- Students are to submit endorsed reimbursement forms with all relevant receipts via CDE Enhancement Programme Portal which will be reviewed and approved by PVO
- PVO will inform supervisors and students of approved claims. PVO will liaise with finance at CDE to release the funds respectively to students
- Briefing will be scheduled for REx Fellows at the start of the semester to share more on administrative matters

In order to receive a CS grade, students will need to satisfactorily complete/submit the following deliverables:

- UREx report
- 5 workshops
- Executive summary

For group projects, UREx deliverables are to be completed by <u>each</u> group member individually

### **UREx Report**

- 10-20 page technical report
- Assessment Criteria
  - Project Design, Execution and Outcomes

Major Attributes: Problem definition and rationale; methodology, execution and analysis; project outcomes

### Competencies

Major Attributes: Ability to troubleshoot and solve problems; commitment; independence

Report Writing

Major Attributes: Organization, formatting and mechanics of writing

### **UREx Workshops**

- Attend a minimum of **5 REx workshops**
- All REx workshops are conducted in person at either Central Library or Medicine+Science Library, unless otherwise stated
- Workshops are scheduled between Week
  5 to Week 13 for both Semesters 1 and 2

#### **Current suite of REx workshops**

Ethics in Research Research Methodologies 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 How to: Oral Presentation for Research Writing a Research Report

All announcements and materials for UREx workshops will be available on **REX1000** CANVAS page.

### **Executive Summary**

- 1-2 page non-technical report meant for laymen audience
  - Should not be 'cut-and-paste' from any sections of UREx report

CDE REx Fellows are required to complete all deliverables (UREx report, attend 5 UREx workshops and executive summary) within 2 regular semesters

- UREx report and executive summary to be uploaded via CDE Enhancement Programmes Portal
- UREx report will be graded by supervisor and executive summary will be reviewed by PVO
- UREx workshops
  - Announcements and materials will be uploaded on REX1000 CANVAS page
  - Tracking of workshop attendance by PVO

## **REX1000 CANVAS Page**

EX1000 > Sylla	62 View as Student
Non-Academic	Research Experience (REx) Programme
Announcements Syllabus	Course description
People Pages Files Modules	Research Experience (REx) programme aims to provide students a holistic research experience for undergraduate students in NUS across all disciplines. Through REx, undergraduate student researchers have access to curated opportunities for learning and experiencing the myriad activities undertaken by research practitioners, and introduces them to important skills and topics that empower them to be responsible and productive researchers. REx workshops include the ethics of research, different types of research methodologies, effective research communications to specialised and non-specialised audiences, and more. Participants in REx also have access to generous financial support to take their research to the next level. They are provided with meaningful platforms to showcase their research work and network with other undergraduate student researchers from other disciplines.
Assignments	REx as a Course Upgrade
Quizzes Course Readings Discussions Videos/Panopto	FOS, FASS, NUS College, SOC       Biz         Upgraded UROP courses:       Upgraded Independent         Study Courses (ISC):       ISC+REx
Outcomes Ø Student Feedback Microsoft Teams classes Microsoft Teams meetings	REx as a Standalone Course CDE CDE2605R: Undergraduate Research Experience (UREx)
Grades     Ø       Rubrics     Ø       Collaborations     Ø       NUS Tools       Settings	<ul> <li>Learning outcomes</li> <li>Understand and develop cognizance of different methods, resources and databases for high-quality research</li> <li>Acquire awareness of ethical considerations and upholding scientific integrity when conducting research</li> <li>Effectively communicate research findings in a clear and coherent manner to specialised and non-specialised audience</li> <li>Relevant application of visual narratives and data storytelling and impactfully presenting research findings</li> <li>Identify the different career native in an ensure of the decisions on career choice</li> </ul>

- All communications and materials for REx workshops will be made available through REX1000 CANVAS page by PVO
- PVO will be onboarding CDE REx Fellows to REX1000 upon approval of UREx applications
- CDE REx Fellows will have access to REX1000 until their final semester in NUS unless they withdraw from the course

### **Timeline for UREx Deliverables**

UREx commences	Deadline to complete UREx deliverables	Grading
Start of Sem 1	End by Sem 1	<ul> <li>Receive 'CS/CU' grade at end of Sem 1</li> </ul>
	End by Sem 2	<ul> <li>Receive 'IP' grade at end of Sem 1</li> <li>Receive 'CS/CU' grade at end of Sem 2</li> </ul>

UREx commences	Deadline to complete UREx deliverables	Grading
	End by Sem 2	<ul> <li>Receive 'CS/CU' grade at end of Sem 2</li> </ul>
Start of Sem 2	End by Sem 1 of next AY	<ul> <li>Receive 'IP' grade at end of Sem 2</li> <li>Receive 'CS/CU' grade at end of Sem 1 of next AY</li> </ul>

PVO will issue UREx e-Certificate of Completion via Accredible to students who have received CS grade

# Withdrawal from UREx

### Withdrawal procedure

- Requests to drop UREx to be made via CDE Enhancement Programmes Portal
  - Go to Undergraduate Research Experience (UREx) > Withdrawal of Interest > Indicate the reason(s) for withdrawal > Submit

### Impact on grades (for Sem 1 and Sem 2)

- Drop UREx between Week 3 and end of Recess Week: Receive 'W' grade
- Drop UREx after Recess Week: Receive 'CU' grade

### Access to UREx grants

- Students will cease having access to grant monies upon withdrawal from UREx. For group projects, remaining group members will still have access to the grant
- Monies will not be clawed back from students in the event of withdrawal from course

# **Comparing UROP to UREx**

Aspect	UROP (EG2605/CDE2605)	UREx (CDE2605R)
Units	4	4
Eligibility	Stage 2 standing (Note: Polytechnic diploma holders are eligible to enrol for UROP as early as Stage 1 standing)	Stage 2 standing (Note: Polytechnic diploma holders are eligible to enrol for UREx as early as Stage 1 standing)
Offered in	Sem 1, 2 and Special Term 1	Sem 1 and 2
Project initiated by	Staff (mostly)	Student
Nature of project	Typically academic research	<ul> <li>Any technical project is fine as long as it serves to facilitate:</li> <li>Independent learning</li> <li>Critical and creative thinking</li> </ul>
Student(s)/project	One	Can be conducted <b>individually</b> or in <b>group</b> (max 4 students)
Supervised by	CDE Academic staff	CDE Academic staff
Grant	Little to none	<ul> <li>SGD 2500 (Individual)</li> <li>SGD 5000 (Group)</li> </ul>
Deliverables	UROP Report (10-20 pg technical report)	<ul> <li>UREx Report (10-20 pg technical report)</li> <li>Executive summary (1-2 pg non-technical report)</li> <li>Attendance for 5 workshops</li> </ul>
Commitment	130 hr (minimum)	130 hr (minimum)

### **Contact Details**

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### More information can be found on the UREx website