

### **Independent Study Course (ISCs)**

# Undergraduate Research Opportunities Programme (UROP)

NUSC Department Ethics Review Committee (DERC)

#### What are Independent Study Courses (ISCs)?

The Independent Study Course (ISC)\* is designed to enable students to explore an approved topic. Through ISC, students will acquire the knowledge, skills and ability to organise an independent piece of study and writing with supervision from an instructor. Like the Honours Thesis, the ISC provides students with the chance to produce an analytic paper (of a lesser scope compared to the Honours Thesis) under the supervision of a lecturer. It is a process-oriented course that integrates reading and writing.

Upon doing the ISC, the student will become familiar with the following:

- Designing an independent study;
- Identifying a topic and formulating a proper question about the topic;
- Identifying and being acquainted with the current stock of knowledge;
- Undertaking independent study and synthesising findings;
- Writing up a report that explains the significance of the study;
- · Identifying limitations and future directions;
- Presenting findings and incorporating feedback into the final paper.

Independent Study Course (ISCs) may take one of the following forms, as elaborated below.

#### Individual or Small Group Study

A student can undertake an individual reading, research or project course under the guidance of a faculty member. A mutually agreed-upon proposal must be drawn up between the student and the mentor. This study proposal must state clearly the student's obligations, the agreed-upon mode of assessment and the relevance of this course to his or her major. The student is required to write a culminating essay or report concerning the findings of the course topic, and should be actively involved in the presentation and discussion of the material.

A small group of (not more than three) students may also undertake an ISC collectively but the group ISC must have a significant component of individual assessment. Group members may submit individual reports or a joint report, depending on the requirements of the mentor and the home faculty.

Past sample project titles and synopses can be found here.

#### **Timeline for NUSC ISC**

#### **Important Notice:**

With effect from Sem 1 AY2022/2023, students applying for the Department Ethic Review Committee (DERC), please email your application directly to NUSC Ethics Review @ nusc.ethics@nus.edu.sg for approval.

#### Timeline for NUSC ISC in AY2024/2025

Tasks	Semester 1	Semester 2
Recommended DERC application period	18 Jun 2024 – 15 July 2024	4 Nov 2024 – 30 Dec 2024
Student to submit ISC application form to nusc.isc@nus.edu.sg	22 July 2024	2 January 2025
Results of ISC application	(Monday, Week 1) 12 August 2024	(Monday, Week 1) 13 January 2025
Student to submit 100-word synopsis, a final written report and turnitin via Canvas	(Friday, Week 12) 8 November 2024	(Friday, Week 12) 11 April 2025
Supervisor to submit student's grade via on- line	(Friday, Week 13) 15 November 2024	(Friday, Week 13) 18 April 2025

<sup>\*</sup> For 2022 Cohort onwards, doing an ISC can fulfil a Making Connections requirement. Refer to your degree's Common Curriculum Mapping document: NUSC + [Your Degree] for specific details.

#### What is Undergraduate Research Opportunities Programme (UROP)?

The Undergraduate Research Opportunities Programme (UROP) is designed to give students a chance to participate in active research. UROP aims to equip students with the knowledge, skills and ability to engage in the processes of intellectual enquiry, problem solving and creative thinking, under the supervision of a faculty member or researcher. UROP enhances intellectual exchange and collaboration between undergraduates and faculty.

- Develop the student's research abilities and engagement;
- Foster skills in collaboration and problem-solving in a real research context;
- Provide students with the opportunity to critically evaluate research practices, and enter into dialogue regarding changes to them;
- Allow students to gather and analyse data, and/or reflect upon cutting-edge work in an area of research in which they are interested.

Past sample project titles and synopses can be found here.

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## **NUSC ISC, UROP, SRIP:** WHAT'S THE DIFFERENCE?

ISC

**UROP** 

**SRIP** 

**CREDIT-BEARING?** 

Yes

Yes

No

**DURATION** 

Semester-long (13 weeks)

Semester-long (13 weeks)

**Summer** (8-12 weeks)

PRIMARY PURPOSE

Literature review/library research to explore; consolidate grasp of existing scholarship.

Research aimed at answering a specific investigation question to produce output that constitutes new knowledge.

For **beginning student** to gain research capability through experience and guided practice.

A brief note on the difference between the contemporary ISC, UROP, and SRIP:

### **Enquiries?:**



#### **Independent Study Course**

An ISC project focuses on exploratory learning, primarily involving literature review and the development of research questions and hypotheses, typically culminating in deliverables (e.g., review papers and presentations) that enable students to consolidate that learning.

The ISC is not primarily about discovering new knowledge as opposed to getting up to speed on existing scholarship.

#### **Undergraduate Research Opportunities Programme**

A **UROP** project typically involves research aimed at answering a specific investigation question so as to produce a research output. Students doing <u>UROP\*REx</u> are expected to produce tangible outputs like a paper or poster, which can be presented at conferences or submitted for publication. The UROP is ideally about the production of new knowledge through research.

Historically, previous students have used the ISC (or ISM—Independent Study Module) for both of the above purposes. In fact, many recent ISCs are very much in the spirit of UROP. With the implementation of both the ISC and UROP at NUSC for students' use, we hope that there will be a clearer division of purpose between them going forward.

#### **Summer Research Internship Programme**

An internship under the **SRIP** is meant to give beginning students the chance to gain research capabilities by having them work with a faculty member on a project designed to help them do that. The emphasis is thus about learning by experience and guided practice; in contrast, both the ISC and UROP assume that students already have such capabilities. In addition, while both the ISC and UROP are credit bearing, the SRIP is not.

#### **NUSC Department Ethics Review Committee (DERC)**

#### **Department Ethics Review**

NUS College (NUSC) Department Ethics Review Committee (DERC) review students' projects that qualify for IRB review exemption.

The objectives of the DERC are:

- to assess the level of risk to human subjects in research projects of the Department's academic staff members and students, and
- 2. to make recommendations on the appropriate type of ethics review for each research project

Exemption is given to the research projects that: Department Ethics Review

Fall into one or more of the IRB exemption categories (view this document for details of the categories)

- 1. Are of minimal risk;
- 2. Does not involve a vulnerable population;
- 3. Does not touch on sensitive topics; and
- 4. Does not involve deception/withholding of study's stated aims and objectives from research participants.

Before obtaining the DERC approval, students should not start the data collection process. Students who violate this rule will be penalised. The DERC's request for amendments to the research protocol, if any, should be followed and reflected in the revised application.

#### Instructions:

- 1. Forms and documents must be submitted in soft copy to the following email, nusc.ethics@nus.edu.sg.
- 2. The NUSC DERC Application Form and Participant Information Sheet (PIS) & Consent Form (CF) can be downloaded here.
- 3. Submissions should include accompanying support documents such as consent form, survey questionnaire, interview/focus group question guide and/or other relevant information.
- 4. Please ensure that the PI of the project and the supervisor both sign the application form.
- 5. We will acknowledge your application within three working days and if you do not receive an acknowledgement, please email to <a href="mailto:nusc.ethics@nus.edu.sg">nusc.ethics@nus.edu.sg</a>.
- 6. The application takes approximately 14 days to process the review. Therefore, students should plan when to apply for the review.
- 7. For urgent applications outside of the above deadlines, please send an email to DERC requesting an urgent review. This request needs to be accompanied by the support of your supervisor.

Please direct all requests to <a href="mailto:nusc.ethics@nus.edu.sg">nus.edu.sg</a>.