INTERNATIONAL SUMMER/WINTER PROGRAMMES (i-SP)           International Summer Programme

IMPORTANT NOTE
Before applying for any summer/winter programme, read the GRO website for important information on:
• General Eligibility Requirements and Application Process
• Module Mapping and Financial Aid
• Visa Application, Travel Advisories and Student Insurance

Technical University of Berlin: Summer Uni On-Campus 2022

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<tr>
<th>Host University Website</th>
<th><a href="https://www.tu-berlin.de/menue/summer_university/summer_university_on_campus_2022/">https://www.tu-berlin.de/menue/summer_university/summer_university_on_campus_2022/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Location</td>
<td>Berlin, Germany</td>
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<tr>
<td>Programme Dates</td>
<td>Only programmes that fall within the vacation period of the NUS calendar tend to be endorsed by NUS. Term II: July 18th - August 12th 2022 (Since this overlaps with Week 1 of AY 2022/2023 Semester 1, NUS students should seek advice from the home NUS faculties if they are able to proceed with embarking on this programme. Students may need to apply for Leave Of Absence to complete the programme. The respective contact information for the various NUS faculties can be found here.)</td>
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<tr>
<td>Application Deadline</td>
<td>20th June 2022</td>
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Please note that there a maximum number of slots available per course. Refer to their website to find the number of slots: https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/ by clicking on the various courses.

Information accurate as of January 2022.

COVID-19 related updates:

Students may be considering physical (on-site) Summer and Research Attachment programmes in 2022. Due to the fluid situation of the COVID-19 pandemic, there is still much uncertainty regarding international travel in the months ahead.

Students’ ability to travel to a country for Summer 2022 will be determined by the host country’s travel policies as well as any updates to the latest travel advisory from Singapore authorities. Do factor in the need for quarantine in the host country and stay-home notice upon return to Singapore when considering the feasibility of participating in these programmes.

To be eligible for physical (on-site) summer programmes, students will need to:

1. be fully vaccinated.
2. complete the compulsory Overseas Travel Preparedness (OTP) module on LumiNUS one month before your programme start date. Search for GRO101 Overseas Travel Preparedness (non-SEP participants AY21/22).
3. submit a copy of the completed Risk Acknowledgement and Consent Form on LumiNUS (folder within the OTP module) one month before the start date of the programme. Look for the ‘Summer Programmes’ folder and a subfolder with the country of your programme.
4. register with the Ministry of Foreign Affairs or your country’s diplomatic mission; and
5. attend a pre-departure briefing conducted by GRO.

NUS reserves the right to withdraw you from the programme(s) if you fail to fulfil any of the above criteria.

Please refer here under Physical (On-Site) Summer Programmes for the most updated information.

Students who proceed with the physical (on-site) option acknowledge the risks associated. NUS will not be responsible for any lost deposits or expenses (including but not limited to programme/tuition fees, air tickets, housing deposits, meal plans and/or non-academic student fees) associated with travel disruptions. Students are advised not to make any financial commitments particularly those which are non-refundable until they are certain that travel is possible. Students will be fully responsible for any and all travel expenses, quarantine accommodation costs, COVID-19 tests or other costs related to the measures imposed at that point of time, both in the host country and Singapore.

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<th>ESTIMATED COST OF PARTICIPATION</th>
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<tr>
<td><strong>Programme Fee</strong></td>
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<td><strong>Summer Course Fees</strong></td>
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<td><strong>Course Type</strong></td>
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<tr>
<td>Standard 4-week course</td>
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<tr>
<td>Special 4-week course</td>
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<tr>
<td>Standard 2-week course</td>
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<tr>
<td>Language courses:</td>
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<tr>
<td>2-week German language course</td>
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Please view this website for the most updated information: [https://www.tub...](https://www.tub-...)

| **Projected Expenditure**       |
| **Breakdown of Costs**          | **Estimated Cost** |
| Programme Fee                   | € 1950            |
| Accommodation at aletto Kudman or Amber Econtel Hotel (twin room) from 16 July to 13 August 2022. | € 1148 to € 1484 |

For full accommodation details, click [here](#).

You are free to organize your own...
**Financial Aid Available Through NUS GRO**

Financial Aid options will not be available for programmes/classes that are conducted fully online. If programmes are hybrid, only on-site participation would qualify a student for financial aid.

Singaporean NUS undergraduate student applicants are eligible to apply for:
- NASA Enhancement Bursary
- Overseas Student Programme Loan
- PSEA Fund Withdrawal

If a physical/on-site programme switches to fully online before the commencement of the programme, NUS reserves the right to adjust or retract the financial aid package.

**PROGRAMME DETAILS**

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<th>Academic Content</th>
<th>CanSat satellite design</th>
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A CanSat is a small satellite in shape of a commercial beverage can that performs several measuring tasks. In this course, a CanSat is designed, built and tested in the field during a rocket launch. Therefore, all basics of topics related to the exciting area of space technologies is imparted and practical skills for the development of a CanSat are trained. The theoretical units are supplemented by practical exercises. Parts of the CanSat are developed in intensely supervised small groups. During an excursion to a site in Berlin where space related companies and institutions are located, the participants shall gain insight into facilities used for the development of satellites.

Please see here for more information: [https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/cansat_satellite_design/](https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/cansat_satellite_design/)

**Startup Crash Course**

In the Startup Crash Course, you will learn how to develop a start-up idea into a successful business model and how to win a startup pitch. As for today, 99% of new businesses fail. We, the creators of this course, think that the main reasons are some myths around the startup scene, which lead to wrong expectations and crippled instruments. The main goal of this course is to increase the success rate of startups. The course offers knowledge on how to start a company and push it to success.
It will have three main parts: the structured approach, hands-on experimentation and feedback. The structured approach is given through lectures and case studies, which serve as a compass. The hands-on experiment consists of individual and group work that makes you try all the new concepts and implement them to your business idea. Feedback comes from interaction with successful entrepreneurs and startup scene players.

Those who develop a high quality business model may be put in contact with Berlin startup supporters.

Please see here for more information: [https://www.tu-berlin.de/menue/summer_university(term_2_on_campus/startup_crash_course)/](https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/startup_crash_course/)

Gaming for virtual and augmented reality

The course addresses the following topics:

- What are extended, augmented, virtual, and mixed reality?
- What tools are used to develop MR applications and how can they be set up?
- Deployment of the app on the phones/tablets of the participants (depending on device capabilities)
- Introduction to programming for extended reality with Unity (scene setup, interactions)
- What is User Experience (UX), what is UX design?
- UX Design and important influencing factors (human/context/system)
- What is user testing, why is it needed, and what method can be used for testing?
- Perform a usability test and use the gathered result during the development

Please see here for more information: [https://www.tu-berlin.de/menue/summer_university(term_2_on_campus/gaming_for_virtual_and_augmented_reality)/](https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/gaming_for_virtual_and_augmented_reality/)

Data Science with Python

Data Science with Python course introduce learners to data science through the python programming language.

This skills-based specialization is intended for learners who have a basic programming background and want to apply statistical, machine learning, information visualization, data analysis techniques through popular python toolkits such as numpy, pandas, matplotlib, scikit-learn, pytorch.

Please see here for more information: [https://www.tu-berlin.de/menue/summer_university(term_2_on_campus/data_science_with_python)/](https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/data_science_with_python/)

Introduction to Artificial Intelligence
Artificial Intelligence has made its way into our everyday language and news cycles. Yet, it’s still hard to define what exactly an AI is. In this course, you will learn why. We will focus on several techniques associated with AI and give you an understanding of how they work and which kinds of problems they can solve. You will learn Planning, Optimization, Reasoning and Machine Learning. We will visit each of these fields based on practical tasks using the programming language Python.

Please see here for more information: https://www.tu-berlin.de/menue/summer_university/term_2_on_campus/introduction_to_artificial_intelligence/

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<th>Eligibility Requirements</th>
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<tr>
<td>The Summer Programme is designed for undergraduate students with any kind of academic background.</td>
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<tr>
<td>NUS’ generic eligibility requirements apply, please see GRO website for details.</td>
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<th>Accommodation</th>
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<td>Accommodation in Berlin can be found here.</td>
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<th>Application Procedure at NUS</th>
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<tr>
<td>Please apply through NUS Education Records System - Global Education (EduRec-GE) first if you want to do module mapping and to apply for financial aids/loans. Applying through EduRec-GE will allow GRO to contact and assist you in times of crisis/emergency while you are overseas.</td>
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<tr>
<td>With an official application through EduRec-GE, you are covered by the NUS Travel Blanket Insurance. Besides, GRO can also provide you with supporting letters for visa application and NS deferment (for NSmen). Read the step-by-step guide which we have prepared for you on GRO’s web.</td>
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<td>You should also apply to the host university concurrently once you have submitted an application in NUS Edu-Rec.</td>
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<th>8</th>
<th>Application Procedure at Host University</th>
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<tr>
<td>Apply here <a href="https://www.tu-berlin.de/menue/summer_university/register/">https://www.tu-berlin.de/menue/summer_university/register/</a>.</td>
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<th>Confirmation of participation</th>
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<tr>
<td>You will be informed by the host via email about possible financial support together with the information on your acceptance or rejection. Please request from FUB a letter of confirmation for your German visa application (if needed).</td>
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<tr>
<td>You have to accept EduRec-GE offer as well as the host university offer to confirm your participation in this programme.</td>
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<td>Please read the cancellation policy of this programme before accepting and paying for the programme.</td>
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<td>Module Mapping</td>
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<td>Transcript</td>
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