BSc
HUMAN FACTORS IN SAFETY
(PART-TIME PROGRAMME)
Programme Overview

Human Factors (also known as ergonomics) is concerned with how people interact with technology, and how their physical and operational environments affect them. It is the study of the capabilities and limitations of people applied to the design of systems, products and work environments to ensure that people are safe and healthy at work and are also able to perform effectively and efficiently.

The BSc Human Factors in Safety (BHFSY) programme covers key knowledge and skills in both the Human Factors discipline and Workplace Safety and Health (WSH). You will be equipped with knowledge on the variability of human characteristics (age, size, strength, sensory and cognitive ability, prior experience, expectations and goals, etc.) and the complexities of technologies and work processes, and organisational contexts. You will learn how to analyse and control Workplace Safety and Health (WSH) hazards, understand various safety and risk management systems, perform and report on WSH audit and investigate workplace accidents. You will also be armed with knowledge on how to evaluate and design or redesign equipment, workplaces, environments and systems to improve safety, health, performance and satisfaction using human factors principles and methodology.

You may pursue Human Factors in Safety as a single subject or in combination with a minor in Military Studies.

Please refer to the SUSS website for details of the minor course.

Unique Features of the Programme

- Distinctive Workplace Safety and Health programme with strong focus on Human Factors
- Unique programme that combines both Human Factors and Safety courses
- Rigorous curriculum governed by strong internal and external quality assurance
- Earn SDU points for WSH Officers and CPD points for FSMs
- Prepares you for an exciting and rewarding career in Human Factors and WSH
- Flexible curriculum designed for working adults

Accreditation & Recognition

- Recognised by the Singapore Ministry of Manpower for WSH Officer registration
- Accredited by the Institution of Occupational Safety and Health (IOSH), UK

For Whom

- Created for individuals looking to join the WSH workforce to play a role in raising the work safety standards in Singapore, as well as WSH professionals wanting to further upgrade their knowledge and skills in WSH and in Human Factors (HF).
- Suitable for safety professionals currently working in industries that require them to be involved in ensuring TOTAL WSH - Workers’ Safety and Health - but have little or no human factors engineering or ergonomics knowledge.
- Catered to those who want to know how to apply HF principles to design products, systems and services to improve usability and user experience.
- Will be of great interest to those who are simply keen to learn more about people – e.g., how we process information and make decisions, why we make mistakes or what motivates us, etc. - and are looking for practical applications for such knowledge.

Career Prospects

Singapore aims to reduce workplace fatality rate to less than 1.0 per 100,000 workers by 2028. In order to achieve this target, it is important that all stakeholders in the workplace play a role in keeping the workplace safe and healthy for all workers and build a strong safety culture. It is important that companies adopt a strong professional stance in the management of the health and safety of their workers through knowledge development, upgrading and training of their safety professionals.

This programme prepares graduates to join the safety workforce with a unique perspective that is grounded on a strong appreciation of human factors and equips them with the essential skills to better manage safety and health challenges that help Singapore realise Vision Zero – every workplace accident and injury is preventable.
Programme Structure

Students are required to complete a total of 130 credit units (cu) to graduate with a basic degree, inclusive of 10 cu of SUSS Core courses and 10 cu of General Elective courses, which are courses offered under the General Studies Programme (course pre-requisites apply). All courses are 5 cu unless stated otherwise.

Compulsory Courses (Total 85 cu)

**Level 1**
- Anatomy and Physiology
- Cognition and Information Processing
- Psychology for Human Factors

**Level 2**
- Behavioural Based Safety
- Emergency Preparedness and Response Planning
- Environmental Hazards and Toxicology
- Human Factors Methods
- Occupational Biomechanics
- Statistical Methods and Inference
- Workplace Evaluation and Design

**Level 3**
- Cognitive Systems Engineering
- Environmental Management and Sustainable Development
- Incident and Accident Investigation
- Risk Assessment and Management
- Safety Management and Audit
- Safety, Risk and Resilience Engineering
- Safety Standards, Legislations and Best Practices

SST Core Compulsory Courses (Total 5 cu)

**Level 1**
- Human Factors and Systems Design

**Elective Courses (Choose 20 cu)**

**Level 1**
- Principles of Project Management

**Level 2**
- Sustainable Society Through Innovative Technology

**Level 3**
- Fatigue Management
- Human Factors in Defence and Security
- Overseas Experiential Learning (Shanghai/Hangzhou)
- Strategic Management of Technology
- Universal Design
- Innovative Safety Coaching and Leadership
- User Centred Design for Interactive Systems

Explanatory Note:

1 Courses accredited by Ministry of Manpower as “structured activities” for Workplace Safety and Health officer to obtain SDUs for certificate renewal.

Minor Programmes

If you prefer to complete a major programme in a different discipline but would like to know or have some knowledge and skills in Human Factors or Safety, you could choose to pair the major of your choice with either a minor in Human Factors or a minor in Workplace Safety and Health.

<table>
<thead>
<tr>
<th>Minor in Human Factors (Choose 40 cu)</th>
<th>Minor in Workplace Safety and Health (Choose 40 cu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Human Factors and Systems Design</td>
<td>- Human Factors and Systems Design</td>
</tr>
<tr>
<td>- Psychology for Human Factors</td>
<td>- Psychology for Human Factors</td>
</tr>
<tr>
<td>- Cognition and Information Processing</td>
<td>- Cognition and Information Processing</td>
</tr>
<tr>
<td>- Occupational Biomechanics</td>
<td>- Occupational Biomechanics</td>
</tr>
<tr>
<td>- Workplace Evaluation and Design</td>
<td>- Workplace Evaluation and Design</td>
</tr>
<tr>
<td>- Environmental Hazards and Toxicology</td>
<td>- Environmental Hazards and Toxicology</td>
</tr>
<tr>
<td>- Human Factors Methods</td>
<td>- Behavioural Based Safety</td>
</tr>
<tr>
<td>- Safety, Risk and Resilience Engineering</td>
<td>- Cognitive Systems Engineering</td>
</tr>
<tr>
<td>- Incident and Accident Investigation</td>
<td>- Safety, Risk and Resilience Engineering</td>
</tr>
<tr>
<td>- Risk Assessment and Management</td>
<td>- Safety Management and Audit</td>
</tr>
<tr>
<td>- Environmental Management and Sustainable Development</td>
<td>- Incident and Accident Investigation</td>
</tr>
<tr>
<td>- Fatigue Management</td>
<td>- Safety Standards, Legislations and Best Practices</td>
</tr>
<tr>
<td>- User Centred Design for Interactive Systems</td>
<td>- Risk Assessment and Management</td>
</tr>
<tr>
<td>- Universal Design</td>
<td>- Environmental Management and Sustainable Development</td>
</tr>
<tr>
<td>- Human Factors in Defence and Security</td>
<td>- Fatigue Management</td>
</tr>
<tr>
<td></td>
<td>- Innovative Safety Coaching and Leadership</td>
</tr>
<tr>
<td></td>
<td>- Universal Design</td>
</tr>
</tbody>
</table>

For more information on our BSc Human Factors in Safety, please visit [suss.edu.sg/BHFSY](suss.edu.sg/BHFSY)
**Admission Criteria**

You must be a Singapore citizen, permanent resident or a resident in Singapore. In addition, you will need to meet these minimum requirements:

- GCE 'A' Level with two passes (prior to 2006) or two H2 passes (from 2006); or local Polytechnic Diploma; or International Baccalaureate (IB) Diploma; or NUS High School Diploma. Applicants with a Diploma from ITE, or other Diploma qualifications plus an acceptable SAT or ACT (with Writing) score may be considered for admission on a case-by-case basis;

- Two years of full-time work experience, or currently employed on a full-time basis; and

- At least 21 years old.

Shortlisted applicants may be required to undergo one or more interview(s) and/or take written admission or other evaluation tests as may be prescribed by SUSS from time to time.

All applications are considered individually on merit, and the offer of admission depends on the number of places available. Admission is solely at the discretion of the Singapore University of Social Sciences.

**How to Apply**

Applications are to be made online via suss.edu.sg. You must submit all the required documents together with your admission application. Incomplete applications will not be considered.

**Tuition Fees and Government Subsidy**

Our tuition fees are on par with those of other local universities. The amount of course fees you pay in each semester depends on the number of courses you take in that semester. The course fees cover all study materials, classes, tutor supervision, assignments and examinations. They do not include fees for textbooks and other additional items specified by SUSS from time to time.

The Tuition Fee Subsidy (TFS) from the Singapore Government comes in the form of a tuition grant administered by the Ministry of Education (MOE) and is offered to all eligible admitted students studying for part-time undergraduate programmes at SUSS. Singapore Citizens aged 40 and above who are pursuing MOE-subsidised undergraduate programmes with SUSS and who are eligible for the SkillsFuture Mid-Career Enhanced Subsidy will enjoy a higher subsidy.

All Singaporeans aged 25 and above can use their $500 SkillsFuture Credit from the government to pay for a wide range of approved skills-related courses. Visit the SkillsFuture Credit website (www.skillsfuture.sg/credit) to choose from the courses available on the SkillsFuture Credit course directory.

Please visit suss.edu.sg for current tuition fees and eligibility criteria for the government subsidy and SkillsFuture Mid-Career Enhanced Subsidy.

**Internet Access**

All SUSS students must have access to a computer/laptop and the Internet in order to use the electronic and website facilities which allow access to course, academic and administrative information.