SPORT SCIENCE & MANAGEMENT
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The SSM programme was established in 2009 in response to an increasing need for qualified sport professionals who are well equipped with the necessary skills and knowledge to support the growing sport industries in Singapore and Asia. The programme has grown rapidly over the years, attracting many top undergraduate students to pursue their interest and passion in the areas of sport management and sport science.

The strength of the SSM programme lies in the expertise of its staff, the quality of teaching, as well as the emphasis on the theory-practice approach for all courses taught. This ensures that our graduates are qualified to take on major roles in the sport industry in future. Like most of the research-active universities, our faculty members obtain competitive research grants, publish in top-tier international peer-reviewed journals, and serve on editorial boards of journals in their fields. We have state-of-the-art sport science laboratories as well as other facilities to support quality teaching and learning for the staff and students. Our faculty members are highly motivated, and always strive for providing the best teaching and learning experience for our students so that they are well equipped for their careers. There are also numerous activities and opportunities provided for our students to participate, learn, and grow holistically. These include research projects, industry experience via the Final Year Project, and the internship programme to ensure that they are well qualified to take on important roles in the future. Our graduates have been well received by employers in the sports industry.

Whether you are a current, potential student, or visitor, you are welcome to contact or visit us. Once again, welcome to the SSM programme at Nanyang Technological University!

Associate Professor
Koh Koon Teck
Introducing SSM

SSM is a robust interdisciplinary degree programme focusing on the scientific principles behind exercise and the human body along with the management of sport organisations. SSM is the only undergraduate programme offered by a local tertiary institute that provides academic and professional pathways to a host of sport-related careers.

Through the four-year direct honours programme, you will acquire knowledge in sport science and sport management, and develop pertinent skills for engagement in the sport industry. Combining branches of physiology, biomechanics, together with skill acquisition, psychology, sport management and coaching, you will graduate capable of taking on exciting careers in a range of industries such as:

- Adapted Physical Activity
- Coaching and Performance Analysis
- Corporate Health and Wellness
- Exercise Prescription and Rehabilitation
- Health Promotion
- Physical Education
- Sport Injury Management and Rehabilitation
- Sport Science Support
- Strength and Conditioning
- Workplace Health and Safety
- Human Resource Management in Sport
- Management of Sport Organisation
- Public Relations in Sport
- Sport Analytics
- Sport Broadcasting and Journalism
- Sport Event Management
- Sport Facility Management
- Sport Marketing and Sales
- Sport Research and Business
- Sport Sponsorship and Advertising
- Sport Tourism
- Sport Tourism
- Sport Tourism
Our Alumni

The SSM programme has provided me with a strong foundation of knowledge necessary for the sport industry. It has helped me develop a holistic understanding of the impact of sport - impact on physical health and mental health, impact on society and impact on the economy. This has helped me to articulate better the rising influence of sport in the economy when facing potential employers.

Talks by leaders in the sport industry, career fairs, and SSM alumni sharing their working experience organised by the SSM Society and faculty during the course of the study were helpful and insightful. These initiatives provided even wider exposure for many students like myself regarding the experience of working in the sports industry, which can translate to better decision-making when it comes to students choosing their career routes.

Seah Yu Hong
Coordinator, Commercial Partnerships
ONE Championship

I work closely with both the coach and athlete to help them quantify, monitor, advise and prescribe strategies to enable them to train effectively and perform during competitions. A key role of the sport physiologist is to advise the coach to craft a periodized training plan that defines not only the key competitions but also the training methodologies implemented throughout the period that would allow the coach and athlete to meet their goals. Additionally, the daily training monitoring and periodic testing are conducted to quantify the training load and measure adaptions to explain the adaptation and/or performance outcomes observed. Sporting performance being multifactorial requires the understanding of the various sport science disciplines to better understand the outcome.

The SSM programme provided a holistic exposure to the various disciplines of sport science that equipped me with the knowledge necessary to comprehend and appreciate these complexities that surround elite sporting performance and interpret the data presented. Furthermore, practical lessons exposed us to various modes of equipment that not only allowed us to acquire practical but also relevant skills necessary to operate the equipment.

Joel Pang Wen Jie
Associate Sport Physiologist, Sport Physiology Department
Sport Singapore,
Singapore Sports Institute
The SSM Experience

Housed within the Department of Physical Education and Sports Science, SSM students utilise state-of-the-art laboratories for sport research purposes.

Other recreational and teaching facilities include outdoor tennis and basketball courts, cardiovascular and resistance training rooms, a 25m swimming pool, an Olympic-sized hockey pitch, and an air-conditioned indoor sports hall and gymnasium.
Faculty

Highly experienced and established local and international faculty members from all over the world teach on the SSM programme. Undergraduate students are supported by faculty members who come from diverse academic, cultural and sport backgrounds and who bring with them a wealth of knowledge for an unparalleled classroom experience.

Drawn from a well-qualified academic body within the Department of Physical Education and Sports Science, the SSM faculty is a collective of passionate and curious individuals consisting of researchers and practitioners possessing extensive experience in their areas of expertise.

“The Sport Science & Management degree is exciting and I am thrilled to share my experience with upcoming young talents. I believe this programme opens up opportunities and brings human resource and expertise to the local and regional sports communities including athletes, coaches, sport scientists, exercise enthusiasts and the fitness industry.”

Associate Professor Stephen Burns
Going Global

From overseas exchanges to study immersion programmes, NTU provides undergraduates a rich array of opportunities for global exposure. SSM students have visited esteemed sport organisations and universities like Loughborough University in the United Kingdom, University of Western Ontario in Canada, University of Queensland in Australia and Pusan National University in South Korea.

These overseas immersions have provided the SSM students with a global outlook and expanded their horizons, giving them a competitive edge in the international arena.
This amazing experience was an adventure in broadening perspectives and knowledge about sport, culture, people and places. Being my first solo-travel to a big foreign country, learning independent living was a major understatement.

Desmond Boey, Immersion trip to Arizona State University, USA

Spending 6 months at Loughborough University provided me with the chance to study at the top sporting university in the UK. This opportunity allowed me to experience a different culture, both in lifestyle and education, as compared to Singapore. It gave me valuable lessons for my personal growth that I will cherish for a lifetime.

Brendan Liang, Immersion trip to Loughborough University, UK

I immersed myself in the Korean sport and culture and learnt the overview of mythology and traditional arts of Korea. I met international students that became close friends that I still keep in touch with. Incredible, irreplaceable experience!

Koh Jiayi, Immersion trip to Pusan National University, South Korea
Scholarships

At NTU, reward and recognition come to those who work hard for it. Many scholarships are available for new and existing students pursuing their full-time undergraduate studies, and are awarded based on academic merit and good co-curricular records.

Scholarships specially administered for SSM students include:

E.W. Barker Scholarship

The E.W. Barker Scholarship is a unique award specifically for SSM students. It aims to nurture talented and committed individuals during their undergraduate studies in the areas of sport science and sport management. This scholarship provides approximately S$8,000 per annum to each successful scholar.

For scholarship and eligibility criteria, visit: http://admissions.ntu.edu.sg/UndergraduateAdmissions/Pages/Scholarships.aspx

I think the biggest difference in the SSM programme from other courses is the burning passion in sports that brings everyone together. This fostered a close relationship between lecturers and students which facilitated learning greatly. I am very grateful to the SSM for providing me with opportunities to participate in international immersion programmes and conferences which has given me a global perspective of the sport industry.

Lim Ming Han, E.W. Barker Scholar
SSM Curriculum Overview

Whether you choose to specialise in sport science or sport management, the general structure of the degree includes 1) SSM core courses 2) SSM major prescribed electives 3) general education requirements 4) a final year project and 5) an internship.

Three Academic Unit (AU) are awarded upon completion of each course (unless otherwise stated). Undergraduates must accumulate a minimum of 134 AU and fulfil all programme requirements for the award of the degree.

<table>
<thead>
<tr>
<th>Year of Study</th>
<th>Major Requirements</th>
<th>General Education Requirements (GER)</th>
<th>Total</th>
</tr>
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<tr>
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<td>GER Core</td>
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<td>Total</td>
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</table>

Description of Abbreviation

- **PE**: Prescribed Electives
- **BM**: Business & Management
- **LA**: Liberal Arts
- **STS**: Science, Technology & Society
- **UE**: Unrestricted Electives
SSM Core Courses:
The first and second year of the SSM degree is common in that all students enrol for the same Core Courses including: Human Anatomy, Exercise Physiology, Sport Psychology, Sport Management and the Sociology of Sport.

SSM Major Prescribed Electives:
Specialisation begins in the third year and continues throughout the fourth year where students elect to undertake courses with a concentration in sport science or sport management.

Students will also have the opportunity to engage in games and sport electives like Strength Training, Tennis and Soccer as part of their Major Prescribed Electives.

General Education Requirements:
Students are also required to undertake General Education Requirement courses offered by the various schools in the University, which will nurture them to become well-rounded professionals with skills that can be deployed in a wide spectrum of careers.

The courses offered to the student have an allocated distribution from Communication Skills, Singapore Studies, Sustainability, Ethics, and Enterprise and Innovation as well as a varied distribution of choices from amongst Business & Management (BM), Liberal Arts (LA), and Science, Technology & Society (STS).

The Unrestricted Electives (UE) allow students to select subjects of their own interest. They can also fulfil this component by taking up academic minors in other schools within NTU like Business, Communication Studies, Psychology, Engineering, and Biological Sciences.
SSM Final Year Project:

Undergraduates will apply their knowledge, critical thinking skills, analytical abilities and innovation to a Final Year Project. This academic project gives students a solid grounding for research and practice in the sport industry.

SSM Internship:

SSM provides students the opportunity to acquire valuable working experience through an Internship programme in their final year of study. Potential internship placements include Sport Singapore, the Ministry of Education, Health Promotion Board, Singapore Sports School, private sport and fitness organisations, various national sport associations, event management companies and corporate health and wellness programmes.

Overseas internship opportunities are also available in multinational organisations.
## SSM Courses

There are 2 semesters in each academic year and students typically take five (~15 AU) to seven (~21 AU) courses per semester.

### Year 1 Semester 1

<table>
<thead>
<tr>
<th>SSM Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SS1101 Human Anatomy and Physiology (3 AU)</td>
</tr>
<tr>
<td>• SS1102 Introduction to Sport Management (3 AU)</td>
</tr>
<tr>
<td>• SS1104 Introduction to Health and Wellness (3 AU)</td>
</tr>
</tbody>
</table>

**General Education Requirements**

- SS0111 Sport and Culture in Singapore: A Sociological Perspective (3 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**

(2 courses x 3 AU = 6 AU)

### Year 1 Semester 2

<table>
<thead>
<tr>
<th>SSM Core Courses</th>
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<tbody>
<tr>
<td>• SS1103 Introduction to Growth and Motor Development (3 AU)</td>
</tr>
<tr>
<td>• SS1105 Foundations of Exercise Physiology (3 AU)</td>
</tr>
<tr>
<td>• SS1106 Psychosocial Aspects of Sport and Exercise (3 AU)</td>
</tr>
</tbody>
</table>

**General Education Requirements**

- AAM08C Computer Literacy through Coding and Applications (3 AU)
- GC0001 Sustainability: Seeing Through the Haze (1 AU)
- HW0128 Scientific Communication I (2 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**

(1 course X 3 AU = 3 AU)
### Year 2 Semester 1

**SSM Core courses**
- SS2101 Foundations of Motor Behaviour (3 AU)
- SS2102 Introduction to Sport Biomechanics (3 AU)
- SS2103 Sport Coaching: Foundations of Coaching (3 AU)
- SS2104 Sport Marketing and Sponsorship (3 AU)
- SS2105 Seminars in Current Issues of Sport (1 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**
(2 courses X 3 AU = 6 AU)

### Year 2 Semester 2

**SSM Core courses**
- SS2106 Physical Activity and Leisure for Special Populations (3 AU)
- SS2107 Research Methods and Design in Physical Activity and Sport (3 AU)
- SS2108 Fundamentals of Sport injuries (3 AU)
- SS2109 Management of Sport Organisations (3 AU)

**General Education Requirements**
- HD0101 Digital Society (3 AU)
- HY0001 Ethics & Moral Reasoning (1 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**
(1 course X 3 AU = 3 AU)
Students choosing sport science specialisation in their third and fourth year have to complete at least six courses from a given list of Major Prescribed Electives. A list of all courses in the final two years is shown below.

### Year 3 Semester 1

<table>
<thead>
<tr>
<th>SSM Core Courses</th>
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</thead>
<tbody>
<tr>
<td>• SS3010 Applied Statistics (3 AU)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SSM Major Prescribed Electives - Specialisation Courses (Select 3 courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SS3111 Environmental Exercise Physiology (3 AU)</td>
</tr>
<tr>
<td>• SS3113 Applied Sport injuries (3 AU)</td>
</tr>
<tr>
<td>• SS3211 Experimental Biomechanics (3 AU)</td>
</tr>
<tr>
<td>• SS3311 Advanced Topics in Exercise and Sport Psychology (3 AU)</td>
</tr>
<tr>
<td>• SS3411 Motor Control and Learning: Theory to Practice (3 AU)</td>
</tr>
<tr>
<td>• SS3412 Adapted Physical Activity and Recreation (3 AU)</td>
</tr>
<tr>
<td>• SS3620 Sport in Society (3 AU)</td>
</tr>
<tr>
<td>• SS3621 Sport Technology, Innovation and Entrepreneurship (3 AU)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• HW0228 Scientific Communication II (2 AU)</td>
</tr>
</tbody>
</table>

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**

(1 course X 3 AU = 3 AU)

### Year 3 Semester 2

<table>
<thead>
<tr>
<th>SSM Major Prescribed Electives - Specialisation Courses (Select 3 courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SS3112 Exercise Prescription (3 AU)</td>
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<tr>
<td>• SS3114 Physical Activity and Health (3 AU)</td>
</tr>
<tr>
<td>• SS3115 Sport Nutrition (3 AU)</td>
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<tr>
<td>• SS3212 Analytical Biomechanics (3 AU)</td>
</tr>
<tr>
<td>• SS3312 Sport Psychology in Theory, Practice and Research (3 AU)</td>
</tr>
<tr>
<td>• SS3313 Sport Coaching: Theory to Practice (3 AU)</td>
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</table>

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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<tbody>
<tr>
<td>• ET0001 Enterprise and Innovation (1 AU)</td>
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</tbody>
</table>

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**

(3 courses X 3 AU = 9 AU)
### Year 4 Semester 1

**SSM Core Courses**
- SS4011 Final Year Project (6 AU)

**General Education Requirements**
- ML0003 Kickstart Your Career Success (1 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives**
(2 courses × 3 AU = 6 AU)

### Year 4 Semester 2

**SSM Core Courses**
- SS4012 Internship - 20 weeks (10 AU)
Students choosing sport management specialisation in their third and fourth year have to complete at least six courses from a given list of Major Prescribed Electives. A list of all courses in the final two years is shown below.

### Year 3 Semester 1

**SSM Core courses**
- SS3010 Applied Statistics (3 AU)

**SSM Major-Prescribed Electives - Specialisation Courses (Select 3 courses)**
- SS3611 Event and Facilities Management (3 AU)
- SS3612 Human Resource Management in Sport (3 AU)
- SS3613 Legal Aspects in Sport (3 AU)
- SS3614 Sport Media and Communication (3 AU)
- SS3619 Advanced Topics in Sport Marketing and Sponsorship (3 AU)
- SS3620 Sport in Society (3 AU)
- SS3621 Sport Technology, Innovation and Entrepreneurship (3 AU)

**General Education Requirements**
- HW0228 Scientific Communication II (2 AU)

*Other General Education Requirements/Unrestricted Electives/SSM Major Prescribed Electives (1 course X 3 AU = 3 AU)*

### Year 3 Semester 2

**SSM Major-Prescribed Electives - Specialisation Courses (Select 3 courses)**
- SS3615 Finance and Business in Sport (3 AU)
- SS3616 Leisure and Recreation Management (3 AU)
- SS3618 Sport Retail Management (3 AU)

**General Education Requirements**
- ET0001 Enterprise and Innovation (1 AU)

*Other General Education Requirements/Unrestricted Electives/SSM Major-Prescribed Electives (3 courses X 3 AU = 9 AU)*
**Year 4 Semester 1**

**SSM Core Courses**
- SS4011 Final Year Project (6 AU)

**General Education Requirements**
- ML0003 Kickstart Your Career Success (1 AU)

**Other General Education Requirements/Unrestricted Electives/SSM Major-Prescribed Electives**
(2 courses X 3 AU = 6 AU)

**Year 4 Semester 2**

**SSM Core Courses**
- SS4012 Internship - 20 weeks (10 AU)
The Nanyang Technological University – University Scholars Programme (NTU-USP)

Students who welcome a rigorous multi-disciplinary programme that complements and bridges NTU’s core disciplines while adding breadth to their academic experience may indicate their desire to be considered for the NTU-USP. Only shortlisted applicants will be invited to the latter stages of the application process. Scholars remain in their home programme, while concurrently pursuing NTU-USP courses and activities that aim to provide opportunities to explore many disciplines outside their own domain of study.

Students who are admitted to NTU-USP are required to take four core courses and select five elective courses of their interest from two academic categories.

Core courses will be read in the student’s first two semesters at NTU, while elective courses can be read throughout the student’s length of study.
Core courses

SP0001 Writing & Reasoning
SP0002 Ethics
SP0005 Quantitative Reasoning
SP0007 Fieldwork & Documentation/ Travel Overseas Programme for Scholars (TOPS)

Elective courses are to be chosen from the following categories:

Arts, Humanities, & Culture (AHC)
Science, Technology, & Society (STS)

AU Requirements for SSM with NTU-USP

<table>
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<tr>
<th>Programme</th>
<th>Year of Study</th>
<th>Major Requirements</th>
<th>NTU-USP Requirement</th>
<th>General Education Requirements (GER)</th>
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<td><strong>Total</strong></td>
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<td><strong>27</strong></td>
<td><strong>12</strong></td>
<td><strong>15</strong></td>
<td><strong>133</strong></td>
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</tbody>
</table>

Programme Year of Study
Major Requirements
NTU-USP Requirement
General Education Requirements (GER)
Total

Core
Major PE
NTU-USP Core
NTU-USP PE
GER Core
UE
Admissions Criteria

Prospective students need to meet minimum requirements for an application into the SSM programme.

**Singapore-Cambridge GCE ‘A’ Level**

- H1 level pass in Mathematics or
- GCE ‘O’ level equivalent pass in Additional Mathematics

**Diploma awarded by a polytechnic in Singapore**

- A polytechnic diploma (regardless of specialisation) from Nanyang Polytechnic, Ngee Ann Polytechnic, Republic Polytechnic, Singapore Polytechnic and Temasek Polytechnic
- GCE ‘O’ level in Additional Mathematics preferred. Those who do not meet the Math requirement but show potential may be called up for interviews and considered on a case-by-case basis

Graduates from certain diploma programmes from Republic Polytechnic’s School of Sports, Health and Leisure are considered for direct entry admissions into second year of the SSM programme.

**International Baccalaureate Diploma**

- Mathematics at standard level
NUS High School Diploma

- Major CAP of 2.0 in Mathematics

International Qualification

- Completed at least 12 years of general education
  - Additional Mathematics at Junior High School level / Mathematics at IB standard level

Singapore Sports School Diploma Programmes

- International Baccalaureate Diploma
- Diploma in Business Studies
- Diploma in Sports and Leisure Management

Student-athletes are encouraged to apply for Discretionary Admissions (DA); an admission scheme for applicants with exceptional talents and/or outstanding achievements beyond schools’ co-curricular activities, subject to a minimum level of academic competence.

Find out more about applying to NTU: http://admissions.ntu.edu.sg/UndergraduateAdmissions/Pages/ApplytoNTU.aspx
Why NTU?

International Experience

Career Boost

World Leader

Global Education

Vibrant Campus Life