

SPORT ANALYTICS, BS

Contact

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Description

The Bachelor of Science in Sport Analytics is a 125-credit hour undergraduate program designed to provide students with the educational knowledge, skill development, research skills and experiential sport industry background to excel in the specialized field of sport analytics. Instruction centers around core curriculum content areas including research methodology, organizational theory, management theory, technology, sport economics, database management, finance, and computer programming integral to sport analytics. The goal is to prepare graduates to be able to not only think conceptually and analytically but also to be able to apply principles to real issues within sport organizations.

The degree provides students with a unique skill set that can be utilized in all aspects of the sport industry including player talent evaluation, sales, scouting, marketing, sponsorship, ticketing, finance, and accounting for professional, collegiate, and amateur sport organizations.

Intra University Transfers

Deadlines to apply: November 1st for Spring entry; March 1st for Fall entry.

The following criteria must be met and will be adhered to by the Sport Analytics IUT faculty subcommittee:

1. A student must have a minimum cumulative GPA of 3.5.
2. In order to complete the requirements of the sport analytics degree within a four-year plan of study; students must have a minimum of five remaining semesters of study.
3. Completed or be in the process of reaching a minimum of 24 credit hours of courses at SU when applying.
4. Recommended completion of the following courses: SPM 205 Principles and Contemporary Issues in Sport Management; MAT 221 Elementary Probability and Statistics I, MAT 295 Calculus I, ECN 101 Introductory Microeconomics and either ECN 102 Introductory Macroeconomics or ECN 203 Economic Ideas and Issues (included in the 24 credit hours required).
5. Recommended completion of at least 6 credits of foreign language coursework. (included in the 24 credit hours required).

Materials to be submitted:

1. Sport Analytics intra-university transfer application
2. Three-page (typed) plan that includes the following:
 - Reason for pursuing this degree
 - Specific areas of interest in sport analytics
 - Proposed research interests as it relates to the senior thesis requirement
 - Sport related experience (volunteer, internship, experiential, and/or community service work)

3. Current resume, including prior sport industry and/or analytical experience.

Notes:

While careful consideration will be given to all students who meet the qualifications outlined above, acceptance into the Sport Analytics undergraduate program is based on space available and current program enrollment.

Student Learning Outcomes

The key learning outcomes are based upon developing skills in mathematics, computer programming and software, databases, economics, communication, and sports data. Upon completion of the program, students will be able to:

1. Explain, discuss, and analyze core principles and concepts of sport management.
2. Compile and organize data from sports teams, leagues, and related businesses.
3. Interpret data from the sport industry and identify patterns via statistical analysis, visualization, and data mining.
4. Develop computer programming skills to be able to extract, scrape, manage, and parse data for use in statistical analyses.
5. Interpret data to make recommendations for business decisions within sport organizations.
6. Communicate sport analytics concepts in writing and orally, clearly, and concisely.

Program Requirements

Code	Title	Credits
Communication Skills		
WRT 105	Studio 1: Practices of Academic Writing	3
WRT 205	Studio 2: Critical Research and Writing	3
CRS 325	Presentational Speaking	3
Quantitative Skills		
MAT 221	Elementary Probability and Statistics I	4
MAT 295	Calculus I	4
MAT 296	Calculus II	2-4
MAT Elective - Select one of the following:		3-4
MAT 222	Elementary Probability and Statistics II	
MAT 331	First Course in Linear Algebra	
MAT 397	Calculus III	
Natural Science		
Natural Science - must include a lab		4
Natural Science elective		3
Liberal Arts		
Liberal Arts		9-12
Social Science Division		
ECN 101	Introductory Microeconomics	3
ECN 102	Introductory Macroeconomics	3
ECN 311	Intermediate Mathematical Microeconomics	3
ECN 421	Game Theory and Economic Strategy	3
Foreign Language/Humanities		

Students satisfy the foreign language requirement for the Sport Analytics program by demonstrating that they have achieved a certain level of competence in a language other than English by either:

9-12

1. Completing a 4-credit language course numbered 201, or a 3- or 4-credit language course numbered 202 or higher; or

2. Demonstrating Competence - Students who successfully complete an approved examination testing aural, reading, and composition skills meet the requirement. Petitions for an examination should be submitted to the specific language coordinator; or

3. International Students - Students whose native language is not English may petition to have the language requirement fulfilled by their knowledge of their natural language.

Beginners can complete the language requirement with a sequence of three 4-credit courses numbered 101, 102, and 201. Each of these courses includes four hours of class and two hours of independent laboratory work in a computer or audio/visual cluster weekly.

Note: Students who fulfill the foreign language requirement by petition or test into, and complete, a 3 or 4 credit language course numbered 201 or higher, will take additional Humanities courses to constitute the necessary credits to have fulfilled 63 liberal arts credits.

University Requirement

In addition to FYS 101, the BS in Sport Analytics requires completion of an IDEA course (chosen from a select list) - The IDEA course may count as a liberal arts, departmental course, or elective depending on the course chosen. Please see the undergraduate course catalog for a full listing of IDEA courses.

FYS 101	First Year Seminar	1
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General Skills

ACC 201	Essentials of Accounting	3
FIN 301	Essentials of Finance	3

Required Courses

SPM 201	Professional Development in Sport Management	1
SPM 205	Principles and Contemporary Issues in Sport Management	3
SAL 213	Sport Data Analysis I	3
SAL 284	Introduction to Python for Sport Analytics	3
or IST 256	Introduction to Python for the Information Profession	
SAL 295	Research Methodology for Sport Analytics	3
SAL 313	Sport Data Analysis II	3
SAL 323	Database and Programming for Sport Analytics	3
or IST 359	Introduction to Database Management Systems	
SAL 384	Advanced Python for Sport Analytics	3
SPM 365	Sport Economics	3
SAL 366	Sport Economics II	3
SAL 413	R for Sport Analytics	3
SAL 495	Sport Analytics Thesis Seminar I	3
SAL 496	Sport Analytics Thesis Seminar II	3

Sport Management Degree Requirements:

A student must choose to complete a minor as part of the degree requirements.

Electives

Electives may be taken in any school or college within the University to reach the required 125 credits, assuming the 63 credits in Liberal Arts and Science is fulfilled.

No more than four credits may be in physical education and no more than six experience credits accepted towards degree.

Senior Thesis

A 2-semester senior thesis is required.

Total Credits: 125

Study Abroad

The College, in cooperation with Syracuse University Abroad (SU Abroad), strongly encourages students to take advantage of the opportunity to study abroad. Study abroad options include semester, summer, and short-stay programs.

SU Abroad offers students the opportunity to participate in a program of study abroad in Santiago, Chile; London, England; Madrid, Spain; Strasbourg, France; Florence, Italy; Hong Kong, China; or Beijing, China. Syracuse University also builds strong overseas affiliations and partnerships, allowing students to be placed directly at other centers and universities.

No prior knowledge of a foreign language is required, except for the Chile program, and students may choose from a variety of courses to fulfill requirements or elective credits for their program of study in the College. It is essential that students begin planning early for study abroad and work closely with their academic advisors.

For further information, contact the Program Manager, Jackie Dorchester, jdorches@syr.edu, 315-443-9369, 300 MacNaughton Hall or Syracuse University Study Abroad, 106 Walnut Place, 315-443-3471.

Undergraduate University Requirements

The following requirements and experiences apply to all Syracuse University Undergraduate matriculated degree programs.

- IDEA Course Requirement (<https://coursecatalog.syracuse.edu/undergraduate/idea-course-requirement/>)
- First Year Seminar (<https://coursecatalog.syracuse.edu/undergraduate/courses/fys/>)