

# Master of Science in Cybersecurity

Offered through College of Extended and Global Education

## Advancement to Candidacy

To be advanced to candidacy, a student must have:

1. Achieved fully classified standing;
2. Completed at least 15 semester units of applicable graduate-level course work at the university, with a minimum grade point average of 3.0 ("B");
3. Completed an approved graduate program plan in consultation with a department advisor.

## Program Description

The Master of Science in Cybersecurity is designed for real world applied experience that combines both cybersecurity and data analytics skills. This program is designed for graduate students seeking to:

- Strategically manage risk through identification, assessment, and mitigation
- Identify security issues on all levels of organizations and the globe, along with law and compliance
- Use data analytics to understand threats, situational awareness, and strategic cybersecurity environments
- Employ data analytics techniques to detect anomalies, to predict and screen cyber threats, and to take corrective actions.
- Learn penetration testing, incident handling, and data and network protection

Upon completion of this program, graduates will be job-ready and prepared to create value for their organization after having taken analytical and cybersecurity courses as well as a practicum/capstone course designed to reinforce learning and practice skills.

## Program Admission

Suitability for admission to the program will be based on an examination of the entire application package. In addition to the general requirements of the university, specific requirements for admission to classified graduate status are:

CSUSB Graduate Admissions Office  
5500 University Parkway  
San Bernardino, CA 92407

The current acceptable exam scores with a 3.0 GPA: GMAT score of 470 (minimum 10% on GMAT Verbal Ability and Quantitative Ability percentile rankings) or a minimum GRE score of 298 (minimum 10% on GRE Verbal Ability and Quantitative Ability percentile rankings).

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1. **Bachelor's Degree:** A bachelor's degree from an accredited college or university, with a grade point average (GPA) of 3.0 or above using

the entire degree or the last 60 semester (90 quarter) units of course work, which may include post baccalaureate work. Students with significant GMAT/GRE scores and/or professional experience may be permitted to join with a 2.5 GPA.

2. **Transcripts:** Submission of official transcripts from all institutions attended to CSUSB Office of Graduate Studies. CSUSB students are not required to submit any CSUSB transcripts. If your transcript is not in English, then you must also send a certified literal English translation of the transcripts along with the official original-language transcripts with proof of degree to:
3. **Personal Statement:** Academic motivation and personal qualifications demonstrated through submission of a 200- to 250-word statement of reasons for wishing to pursue the Master of Science in Cybersecurity at California State University, San Bernardino, and personal qualifications that will contribute to the successful completion of the program.
4. **English Proficiency for International Students:** An applicant whose education has been in a language other than English must submit proof of English ability. They can satisfy this requirement in a number of ways:
  - Test of English as a Foreign Language TOEFL (iBT 79/80 or PBT 550) taken within the past two years.
  - IELTS exam score of 6.5 taken within the past two years, or
  - Complete level 4 of CSUSB's Intensive English Program (IEP).
5. **Resume:** Submission of a current resume.
6. **Letters of Recommendation:** Two letters of recommendation are required.
7. **Business Aptitude Requirement:** Applicants for Master of Science in Cybersecurity must meet ONE of the following Business Aptitude requirements:
  - 3.0 cumulative GPA from a regionally accredited undergraduate program
  - Minimum two years of post-undergraduate professional and/or managerial experience or industry-relevant certifications.
  - Proof of completion of an accredited graduate degree (e.g. J.D., Ph.D., M.D.) from an accredited college or university with a minimum GPA of 3.0 in the graduate program.
  - Submission of an acceptable score on the Graduate Management Aptitude Test (GMAT) or Graduate Record Exam (GRE).

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8. **Conditionally classified status:** Students who meet all entrance requirements may be admitted to the program in a conditionally classified status. Once students meet the minimum passing level of "B" for IST 6115 (or successfully complete a "credit by exam" for the course) they will be advanced to classified graduate standing in the program. Only fully classified students, however, may enroll in the other 6000-level core courses unless they have written consent from the IDS Department Chair.

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## Requirements for Graduation

1. A minimum of 30 semester units of acceptable graduate-level work, consistent with the program plan (with a grade point average of 3.0), with at least 21 units completed at the university, and at least 21 semester units of 5000-6000-level course work;
2. Successful completion of the required foundation and core courses as outlined in the program curriculum section;
3. After advancement to candidacy, students must complete a culminating experience project course (3 units). Only students who are currently classified, have completed the required foundation and core courses, have been advanced to candidacy, have obtained approval of the MSCA program coordinator, have grades of "B" (3.0) or better, no "incomplete" grades, and are not on probation may do the culminating experience project.

## Degree Requirements (30 units)

The 30 unit Master of Science in Cybersecurity degree program Consists of three "modules," each consisting of three courses (one 4-unit course and two 3-unit courses).

### Core Requirements (30)

IST 6115	Fundamentals of Cyber Security	4
IST 6117	Network Security 1	3
IST 6125	Law and Policy	3
IST 6215	Network Security 2	3
IST 6232	Risk Assessment & Management	4
IST 6235	Cyber Analytics and Visualization	3
IST 6395	Contemporary Issues and Practices in Cybersecurity 1	3
IST 6397	Contemporary Issues and Practices in Cybersecurity 2	3
Culminating Experience		4
<b>Total Units</b>		<b>30</b>