

Master of Science in National Cyber Security Studies

The Master of Science in National Cyber Security Studies will prepare students for careers in the field of cyber security and intelligence analysis.

The program is designed for students who are interested in developing the professional skills necessary to understand cyber security threats and communicate strategic intelligence effectively to decision-makers in government, the military, law enforcement and the private sector. No prior technical experience is required in the field of cyber security and the degree is open to students from any academic background.

The National Cyber Security Studies program is part of the Intelligence Community Center of Academic Excellence (IC CAE) at CSUSB, which was awarded in 2006 by the Office of the Director of National Intelligence (ODNI).

Admission to the Program

In addition to the general requirements of the university, specific requirements for admission to classified graduate status are:

1. A baccalaureate degree from an accredited college or university;
2. A minimum cumulative undergraduate grade point average of at least 2.5 overall and at least 3.0 ("B") in the student's undergraduate major;
3. Submission to the National Security Studies Admissions Committee of a brief statement (one or two double-spaced typewritten pages) that demonstrates the ability to communicate clearly through writing, an understanding of our graduate program, and preparation for graduate study;
4. Submission of two letters of recommendation from individuals familiar with the student's academic or professional work and potential to complete the program successfully.

Students who meet the requirements for admission to graduate study, but who do not meet the program requirements, may be admitted to graduate study in unclassified postbaccalaureate status or to the program in conditionally classified graduate standing. When the specified deficiencies are removed, student status is changed from conditionally classified to classified. (Unclassified postbaccalaureate students may enroll, when space is available, in selected graduate courses.) No more than 12 semester units of national security studies course work taken as an unclassified or conditionally classified graduate student may be applied to the program as a classified graduate student.

Advancement to Candidacy

To be advanced to candidacy, a student must have:

1. Achieved classified status;
2. Selected a graduate advisor to supervise the course of study;
3. Completed at least 18 semester units of national cyber security studies program course work at this university, and achieved a minimum grade point average of 3.0 ("B") in those courses;

4. Filed a graduate program approved by the student's advisor, the national cyber security studies graduate coordinator and the Dean of Graduate Studies.

Requirements for Graduation

1. A minimum of 36 semester units of acceptable graduate-level work, with at least 30 semester units completed in residence at California State University, San Bernardino. A minimum of 30 semester units must be at the 5000-6000 level;
2. A grade point average of at least 3.0 ("B") in all national security studies program courses taken;
3. Choose Option A or B:
 - a. Completion of acceptable comprehensive final written and oral examinations;
 - b. Completion and defense of an original master's thesis;
4. The graduation writing requirement will be satisfied by achieving a minimum grade point average of 3.0 ("B") in the following three core courses. Each core course will allow the student to develop competence in three forms of writing traditional to the field:
 - a. Writing for Intelligence (PSCI 6210),
 - b. Analysis of Cyber Security (PSCI 6030),
 - c. Analysis of either theory or practice of strategy (PSCI 6000 or PSCI 6020);
5. Any additional general requirements not cited above and listed in Graduate Degree and Program Requirements (<https://catalog.csusb.edu/graduate-degree-programs/graduate-degree-program-requirements/>).

Classified graduate students in the Master of Science program must complete their degree requirements within five years of admission to the program. Students in classified status who fail to register for at least one course in the program each semester will automatically be declassified. PSCI 6980-6986, Continuous Enrollment for Graduate Candidacy Standing, must be taken if another course is not taken during a given semester.

The Master of Science in National Cyber Security Studies is a thesis option course of study requiring either written and oral comprehensive examinations (to be taken in the last semester of program course work) or a thesis. Students with less than a 3.0 grade point average in the program will not be permitted to take the examinations or propose a thesis. All students are required to take the prerequisite, Core and Cyber Security field courses.

Comprehensive Examination

Comprehensive examinations must be taken in the Core and the Cyber Security fields. The comprehensive examination committee for each candidate will consist of the Core advisor, one advisor from the Cyber Security field and a third faculty member from either department. The examinations will be graded credit/no credit.

An oral examination by the student's committee follows successful completion of the written examination. The oral examination is open for public attendance, but not participation. Should the candidate fail one or more written or oral examination areas, the entire oral or written examination may be repeated one time after remedial course work or study is completed. The scope and deadline for completion of this remedial work will be determined by the student's examination committee at a post-examination conference.

Students must enroll in PSCI 6980 - the Political Science Comprehensive Examination..

Thesis

The criteria for determining who will be allowed to choose the thesis option will be determined by the proposed thesis committee. Students are still required to develop a course of study consistent with the Core and Cyber Security fields, as noted above. After completion of a minimum of 21 semester units, the student will request three faculty to form a preliminary committee, at least two of whom have instructed a course that the student has taken in the program in each of the Core and Cyber Security fields.

Degree Requirements (36-39 units)

(Program Code: NCSS)

Core courses (18)

PSCI 4840	National Security Policy	3
PSCI 5900	Seminar in International Relations (Techniques of Intelligence Analysis)	3
PSCI 6000	Theory and History of Strategy	3
PSCI 6020	International Security	3
PSCI 6030	Cyber Security and Cyber Warfare	3
PSCI 6210	Intelligence Assessments and Estimates	3

Cyber Security Field (15)

IST 5250	Incident Handling and Cyber Investigation	3
IST 6470	Database Management and Policies	3
IST 6700	Cybersecurity Policy and Risk Management	3
IST 6720	Cyber Defense and Vulnerability Analysis	3
IST 6730	Cybersecurity Theory and Practice	3

Electives (3)

Three units chosen from among courses not used for the core requirements listed below. 3

ECON 6303	International Economic Issues	
GEOG 6100	Military Geography for National Security	
HIST 5560	Foreign Relations of the United States	
MATH 6411	Operations Analysis	
PSCI 5400	Seminar in Comparative Politics (Middle East Politics)	
PSCI 5400	Seminar in Comparative Politics (African Dictatorships)	
PSCI 5400	Seminar in Comparative Politics (East Asian Politics)	
PSCI 5400	Seminar in Comparative Politics (Latin American Politics)	
PSCI 5900	Seminar in International Relations (Intelligence and Ethics)	
PSCI 5900	Seminar in International Relations (Terrorism in Africa)	
PSCI 5900	Seminar in International Relations (US - Israel Relations)	

PSCI 5900	Seminar in International Relations (Cases in Strategy)	
PSCI 5920	Seminar in Government (Research Methods)	
PSCI 6040	Seminar in International Law	
PSCI 6050	Topics in Strategy:	
PSCI 6060	Analysis of International Terrorism	
PSCI 6090	International Relations Theory	
PSCI 6110	Regional Security of Eurasia	
PSCI 6120	African Security	
PSCI 6130	Middle East Security	
PSCI 6140	Regional Security of East Asia	
PSCI 6200	Understanding Intelligence Failure	
PSCI 6220	Arms Control	
PSCI 6240	Politics of National Security	
PSCI 6250	American Foreign Policy	
SSCI 6950	Directed Graduate Studies	

Culminating Experience (0-3)	0-3
Total Units	36-39

Culminating Experience (0-3 units)

Students must complete one of the following:

Choose one from:	0-3
PSCI 6973 Thesis ¹	
PSCI 6980 Comprehensive Examination	
Total Units	0-3

¹ Thirty six units of course work and three units of thesis must be completed before the degree will be awarded.