

Required Courses	Credit Hours
GPOSC 225. U.S. Government	4
SCOM 240. Process of Human Communication	3
POSC/SCOM/SMAD 472. Media and Politics	3
Choose one of the following:	3-4
Non POSC and SCOM majors	
SCOM 318. Practicum in Communication Studies (3 credits)	
POSC or SCOM majors	
POSC 495. Internship (4 credits)	
SCOM 495. Internship (3 credits)	
Choose one of the following:	3
POSC 365. American Political Campaigning	
POSC 369. Parties and Elections	
Choose one of the following:	3
SCOM 353. Political Communication	
SCOM 453. Political Campaign Communication	
Choose two of the following:	6
POSC 362. Political Behavior	
POSC 368. Interest Groups and Public Policy	
POSC 383. Women and Politics	
POSC 385. The U.S. Congress	
SCOM 341. Persuasion	
SCOM 346. Free Speech in America	
SCOM 352. Communication and Social Movements	
SCOM 354. Communication, Environment and Environmentalism	
SCOM 431. Legal Communication	

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For additional information, contact the head of the Department of Political Science, the director of the School of Communication Studies, or the coordinator of the minor in political communication.

Russian Studies

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This minor offers students a broad, interdisciplinary perspective on Russian culture, history, political institutions, economy and geography. This program deepens the students' understanding and knowledge of the Russian and non-Russian peoples of the former Soviet Union, and prepares them for careers in teaching, government and international business. The minimum requirement for a minor in Russian studies is 18 hours. Students should take courses in at least three different disciplines from the following list:

Required Courses

- ECON 301. Economies in Transition
- GEOG 333. Russian and the Former USSR
- HIST 385. Russia to 1855
- HIST 386. Russia Since 1855
- HIST 475. Modern Russia
- POSC 337. Russia and Post-Soviet Politics
- RUS 266/GHUM 200. Russian Literature in Translation/Great Works
- RUS 300. Russian Conversation and Composition
- RUS 308. Introduction to Russian Civilization
- RUS 315. Russian Phonetics
- RUS 320. Advanced Russian Grammar
- RUS 405. Russian Literature of the 19th Century
- RUS 426. Russian Literature of the 20th Century
- RUS 438. Studies in Russian Literature

Students may include one course from the following list:

- ECON 490. Special Studies in Economics
- FL 490. Special Studies in Foreign Languages (Russian)
- GEOG 490. Senior Project II

- HIST 399. Special Studies in History
- POSC 490. Senior Tutorial in Political Science

With the approval of the program adviser, six to eight hours of Russian language may be included in the minor. Students may also earn credit by studying in a program in Russia or any of the former Soviet states.

Science, Technology and Society

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Science, technology and society (STS) is an internationally recognized field of interdisciplinary study that integrates social scientific and humanistic studies to better understand the natural and human-built world. The minor in STS offers students the opportunity to critically examine science, technology and medicine as expressions of human cultures, past and present. Students learn to scrutinize the ideas, values and materials embedded in the world they inhabit today and to relate them to other times and places. They explore how choices made within various social, economic and political structures influence the development of science, technology and medicine. They also see how the adoption and diffusion of ideas, artifacts and techniques can then influence individuals, society, politics and culture. Courses in this minor draw students together from diverse majors across the campus and encourage open inquiry into the role of science and technology in society.

The minor in STS is open to all undergraduate students at JMU. Courses taken to complete the STS minor can also be used to satisfy the student's major, as well as General Education requirements.

The STS minor requires 18 credit hours with at least one course each from the history, sociology and ISAT courses listed below.

Required Courses	Credit Hours
Choose one:	3
ISAT 131. Technology, Science, and Society	
SOCL 315. Science, Technology, and Society	
HIST 327. Technology in America	

Elective courses

Choose five from at least four different programs/majors	15
ANTH/ARTH/HIST 492. American Material Culture	
ANTH/SOCL 313: Processes of Social and Cultural Change	
ANTH340. The Invention of Race	
ANTH 360. Medical Anthropology	
ANTH 373. Anthropological Perspectives on Environment and Development	
ARTH 303. History of Design	
ARTH 474. The New Media and Contemporary Art	
ARTH 476. Modern Architecture	
GEOG 322. Agricultural Systems	
GEOG 325. Environmental Ethics	
GEOG 344. Economic Geography and Development Issues	
HIST 305. History of Science and Christianity	
HIST 326. The Automobile in 20th Century America	
HIST 327. Technology in America	
HIST 328. History of Science, 1534 – 1859	
HIST 329. History of Science Since 1859	
HIST 405. Travel and Exploration	
HIST 427. U.S. Environmental History	
HIST 443. Modern American Technology and Culture	

- HIST 481. Early Modern Europe: The New Worlds of Exploration and Science
- ISAT 231. Political Economy of Technology and Science
- ISAT 311. Role of Energy in Modern Society
- ISAT 411. Energy Economics and Policy
- ISAT 421. Environmental Policy and Regulation
- ISAT 456. Ethical, Legal and Social Implications of Biotechnology
- ISAT 471. Transportation: Energy, Environment and Society
- ISAT 477. Complex Systems and How They Fail
- PHIL 300. Knowledge and Belief
- PHIL 395. Philosophy and Scientific Inquiry
- SOCI 311. Sociology of the Environment
- SOCI 316. Space, Time and the Human Social Environment
- SOCI 366. Sociology of Knowledge
- SOCI 375. Medical Sociology
- WRTC 350. Science and Technology in Literature

Special topics courses not listed can be applied to the minor with prior approval of the program coordinator.

Substance Abuse Intervention

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This 22-credit hour interdisciplinary substance abuse intervention minor prepares the student to understand the impacting forces on the abusing individual and help the individual seek aid as appropriate. The SAI minor also prepares the student to assist communities in designing science-based prevention programs. Course work in the SAI minor can lead to certification as a Certified Prevention Professional, Alcohol, Tobacco and Other Drug (CPP-ATOD).

There is a moratorium on the SAI minor for the 2009-10 academic year.

Required Courses	Credit Hours
HTH 378. The Use and Effects of Drugs	3
HTH 407. Health Education Facilitation/Synthesis	2
HTH 451. Strategies for Health Change	3
HTH 458. Health Program Planning and Evaluation	3
HTH 488. Substance Abuse Prevention Basics	1
SOWK 317. Skills for Generalist Social Work	3
Choose one of the following:	3
PSYC 285. Drugs and Behavior	
PSYC 308. Health Psychology ¹	
Choose one of the following:	3
SOCI 327. Juvenile Delinquency	
SOWK 340. Violence in Families	
SOWK 387. Working with Teenagers	
Choose one of the following:	1
HTH 357. Coping with Stress	
HTH 278. Alcohol Use and Abuse	
HTH 389. Health Education Practicum	

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¹ Prerequisite is PSYC 101 and junior status.

Telecommunications

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The interdisciplinary minor in telecommunications is designed to augment the student's major program with a package of courses that will prepare the graduate to obtain a position as a telecommunication/network professional and fill a societal need in one of the fastest growing areas of technology.

The program is developed as a minor principally for three major programs: computer science; integrated science and technology; and computer information systems. However, the program is open to any undergraduate with an interest in telecommunications and some computer background.

The telecommunications minor will instill knowledge of:

- Telecommunication terminologies, standards, policies and procedures.
- Basics of data transmission, digital signal processes and signaling hierarchies.
- Architectures, communications protocols, and components of LANs, WANs and internetworks.
- The TCP/IP and ATM protocol suites.
- Switching, routing and traffic management in inter-networked environments.
- Voice, video and data transmission over IP and ATM.
- Application development for the Internet.
- Distributed object systems programming and management.

The requirements for the minor are 18 credits shown below. Students are encouraged to check prerequisites. At most four courses can be used to satisfy both the telecommunications minor and a student's major requirements.

Required Courses	Credit Hours
CIS/CS 320. Telecommunications and Information Processing	3
SMAD 356. Telecommunications Policy and Regulation	3
CS 460. Local Area Networks	3
CS 461. Internetworking	3
CS 462. Network Applications Development	3
Choose one of the following:	
CS 239. Advanced Computer Programming	4
CIS 331. Intermediate Computer Programming	3
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Urban and Regional Studies

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The minor in urban and regional studies prepares students for careers or graduate training in government. While satisfying the B.A. or B.S. requirements of their chosen major, students may complement that major with a 24 credit hour minor in urban and regional studies drawn from the following courses.

Required Courses	Credit Hours
ECON 475. Regional Economics	3
GEOG 376. Urban Geography	3
POSC 360. Urban Politics	3
SOCI 265. Sociology of the Community	3
Choose from the following ¹ :	12
ECON 326. Public Finance	
ECON 340. Economics of Natural Resources	
FIN 210. Principles of Real Estate	
GEOG 315. Field Studies	
GEOL/GEOG 310A-D. Environmental Impact (2-3 credits)	
GEOL 340. Soil and Land Use	
POSC 302. State and Local Government	
POSC 495. Internship in Political Science (4 credits)	
SOCI 352. Birth, Death, Sex: Exploring Demography	
SOCI 361. Bureaucracy and Society	

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¹ Must be in a discipline other than the student's major.