

SAN JOSE STATE UNIVERSITY

Bachelor of Science in Industrial Technology Computer Network Systems Management Concentration

FRESHMAN YEAR

Fall	Units
Comm 20 or 20N Public Speaking (GE: A1)	3
English 1A , Composition I (GE: A2)	3
Engr 10, Introduction to Engineering (GE:E)	3
Tech 60, Introduction to Electronics	3
Tech 65, Network Theory & Applications	3
Total:	15

Spring	Units
CmpE 30, Program Concept & Method	3
Engl 2, Critical Thinking & Writing (GE: A3)	3
Math 71, Calculus for Bus & Aviation	3
Tech 63, Analog & Digital Circuits	3
Tech 66, Network Administration	3
Total:	15

SOPHOMORE YEAR

Fall	Units
Econ 1B, Principles of Economics: Micro	4
GE Area C1	3
Phys 2A, Fundamentals of Physics	4
Tech 67, Analog Circuits	3
Total:	14

Spring	Units
GE Area C2	3
GE Area D1	3
GE Area D2	3
Phys 2B, Fundamentals of Physics II	4
Tech 68, Internet of Things (IoT) Systems	3
Total:	16

JUNIOR YEAR

Fall	Units
Bus 90, business Statistics	3
Chem 1A, General Chemistry	5
GE Area D3	3
Tech 165, Wireless Communication	3
Tech 170, Connected Products Applications	3
Total:	17

Spring	Units
Bus 140, Fund of Operations Management	3
Bus 146, Project Management	3
Engr 100W, Technical Reports (GE: R, Z)	3
Tech 145, Lean Manufacturing	3
Tech 171, Network Sec & Prevent Mgmt	3
Total:	15

SENIOR YEAR

Fall	Units
Bus 142, Total Quality Mangement	3
Bus 186, Professional & Bus Ethics (GE: S)	3
Tech 173, Fund of Cloud Comp System Mgmt	3
Tech 179, Cyber Security System Mgmt	3
Tech 190A, Senior Project I	3
Total:	15

Spring	Units
Tech 136, Quality Management	3
Tech 190B, Senior Project II	3
Tech 198, Tech & civilization (GE:V)	3
Technical Elective	3
Technical Elective/Coop/Internship	1
Total:	13

Total units for degree : 120

The Bachelor of Science in Industrial Technology Program with concentration in Computer Network System Management is designed to prepare graduates with in-depth knowledge and hands-on experience for careers such as Network Specialist/System Administrator/Managers and Computer Security Specialist.

This program will allow graduates to earn a minor in business as a part of its curriculum.

Industrial Technology Program Required Course Prerequisites & Co-Req's	
Course	Prerequisites
Bus 90, Business Statistics	Math 71
Bus 140, Fund of Operations Management	Upper Division Standing
Bus 141, Materials Management	Upper Division Standing
Bus 142, Total Quality Management	Upper Division Standing
Bus 146, Project Management	Upper Division Standing
Bus 186, Professional and Business Ethics	Pass WST, Upper Division Standing
Chem 1A, General Chemistry	High school chemistry or Chem 10
CmpE 30, Programming Concepts And Methodology	none
Econ 1B, Principles of Economics: Microeconomics	none
Engr 10, Introduction to Engineering	Eligible for Math 019 or Engl 001A
Engr 100W, Engineering Reports	Pass WST, Upper Division
Math 71, Calculus for Business and Aviation	Math 8 or Math 19
Phys 2A, Fundamentals of Physics	Algebra
Phys 2B, Fundamentals of Physics	Phys 2A
Tech 60, Introduction to Electronics	Math 8
Tech 63, Digital Circuits	Tech 60
Tech 65, Networking Theory and Application	Tech 60
Tech 66, Network Administration	Tech 65
Tech 67, Intro to Internet of Things	Tech 60, Tech 65
Tech 68, Intro to Internet of Things (IoT) Systems	CmpE 30, Tech 67
Tech 136, Quality Manufacturing	Tech 31
Tech 145, Lean Manufacturing	Bus 140 or 145 or ISE 140
Tech 146, 3D Printing and Applications	Tech 20A, Tech 25, Tech 140
Tech 147, Green Mfg Analysis & Mgmt	Tech 45, Tech 46, Tech 115 Coreq: Tech 140
Tech 149, Computer Integrated Mfg Sys	Tech 147, Coreq: Tech 145
Tech 165, Wireless Communications Tech	Tech 63, Tech 65
Tech 170, Connected Products Applications	Tech 68
Tech 171, Network Sec & Prevent Mgmt	Tech 65, Tech 66
Tech 172, Database Server Management	CmpE 30
Tech 173, Fund of Cloud Comp System Mgmt	Tech 171, Corep: CmpE 30
Tech 179, Cyber Security Systems Mgmt	Tech
Tech 190 A, Senior Project I	Engr 100W, Senior Standing
Tech 190 B, Senior Project II	Tech 190 A
Tech 198, Technology and Civilization	Pass WST, Upper Division Standing