PHYS 4B   Physics for Scientists and Engineers...4
Select a minimum of four courses from the following[1] **15-17**
ENGR 6   Electric Circuits Analysis with Lab...4
Must take two of the following programming courses[2, 3]:
ENGR 40[2, 3] Programming for Scientists and Engineers...4
Or
ENGR 5[2, 3]   Programming and Problem-Solving in MATLAB...3
Or
CSCI 40[2, 3]   Programming Concepts and Methodology I 4
CHEM 1A[4] General Chemistry..5
Or
CHEM 3A[4] Introductory General Chemistry...4
PHYS 4C   Physics for Scientists and Engineers 4

Total Units:... **44-46**

[1] Student should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some transfer institutions will have minimum requirements for transfer that will necessitate choosing more than 4 courses from this section.
[2] As a first programming course, student should complete the programming course specifically required by his or her transfer institution of choice. The choices are: ENGR 40 Programming for Scientists and Engineers (4 units), ENGR 5 Programming and Problem Solving in MATLAB (3 units), and CSCI 40 Programming Concepts and Methodology I (4 units).
[3] Credit will not be given for both ENGR 40 and CSCI 40. If ENGR 5 was chosen as a first programming course, then the student could choose ENGR 40 or CSCI 40 as a second programming course. If ENGR 40 or CSCI 40 was chosen as a first programming course, then the student could choose ENGR 5 as a second programming course.
[4] Student should check the minimum chemistry transfer requirements for his or her intended transfer institution.

Advisor: Glaves

ELECTRICAL ENGINEERING
(Major #C.3012.CA)
CERTIFICATE OF ACHIEVEMENT

Program Goals:
A student earning this certificate of achievement will have completed the lower division STEM coursework necessary to transfer into a bachelor's degree program in Electrical Engineering. In addition, a student earning this certificate of achievement will be prepared for engineering internship opportunities.

The college has heretofore had a successful program for general engineering transfer. Associated with this program is an existing AS degree called Engineering. Most engineering transfer students have heretofore transferred successfully without completing the requirements for this degree. The main reason for this has been that the high units loads in the program's STEM areas have precluded the students from taking enough general education units to meet the AS degree requirements. Engineering students at four-year universities have this same issue and are allowed by their institutions to spread their lower division general education coursework over all four years of their degree. This certificate will effectively allow our engineering transfer students to do the same thing while also earning a credential from our college that recognizes their achievement.

Our existing Engineering AS degree is being replaced by four new more specific certificates of achievement, this certificate of achievement being one of them. The new certificates of achievement recognize that students will likely transfer without fully completing lower division education requirements and also recognize the slight differences in lower division preparation between the different types of engineering BS degrees and guide the students accordingly. These new certificates of achievement proposals follow closely the recommendations of the California FDRG group for lower division engineering preparation. All courses in the new certificates of achievement are existing Clovis Community College courses that students have been using successfully to transfer to four-year engineering programs.
For students who wish to transfer in engineering and in addition earn an Associate of Science degree, the college has also developed four engineering AS degrees. These are essentially the same as the engineering certificates of achievement, but include the local general education requirements for our AS degrees.

Program learning outcomes:

A student who successfully completes this certificate of achievement will be able to:

1. Apply knowledge of mathematics, science, and engineering fundamentals to solve engineering problems.
2. Conduct laboratory experiments. Analyze and interpret the data resulting from these experiments.
3. Make basic design decisions concerning engineering problems.
4. Communicate solutions to engineering problems using effective oral, written, and graphical methods.
5. Demonstrate knowledge of the impact of engineering solutions in a global and societal context.
6. Use the techniques, skills, and software tools of modern engineering practice.

Catalog Description:

A student earning this certificate of achievement will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Electrical Engineering. In addition, a student earning this certificate of achievement will be prepared for engineering internship opportunities.

Required Core Courses	**29**
ENGR 10 Introduction to Engineering	2
MATH 5A Math Analysis I	5
MATH 5B Math Analysis II	4
MATH 6 Math Analysis III	5
MATH 17 Differential Equations and Linear Algebra	5
PHYS 4A Physics for Scientists and Engineers...	4
PHYS 4B Physics for Scientists and Engineers..	4
Select a minimum of four courses from the following[1]	**15-17**
ENGR 6 Electric Circuits Analysis with Lab..	4
Must take two of the following programming courses[2, 3]:	
ENGR 40[2, 3] Programming for Scientists and Engineers.......................................	4
Or	
ENGR 5[2, 3] Programming and Problem-Solving in MATLAB..................................	3
Or	
CSCI 40[2, 3] Programming Concepts and Methodology I	4
CHEM 1A[4] General Chemistry..	5
Or	
CHEM 3A[4] Introductory General Chemistry..	4
PHYS 4C Physics for Scientists and Engineers	4
Total Units:..	**44-46**

[1] Student should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some transfer institutions will have minimum requirements for transfer that will necessitate choosing more than 4 courses from this section.
[2] As a first programming course, student should complete the programming course specifically required by his or her transfer institution of choice. The choices are: ENGR 40 Programming for Scientists and Engineers (4 units), ENGR 5 Programming and Problem Solving in MATLAB (3 units), and CSCI 40 Programming Concepts and Methodology I (4 units).
[3] Credit will not be given for both ENGR 40 and CSCI 40. If ENGR 5 was chosen as a first programming course, then the student could choose ENGR 40 or CSCI 40 as a second programming course. If ENGR 40 or CSCI 40 was chosen as a first programming course, then the student could choose ENGR 5 as a second programming course.
[4] Student should check the minimum chemistry transfer requirements for his or her intended transfer institution.

Advisor: Glaves

MECHANICAL, AEROSPACE, OR MANUFACTURING ENGINEERING
(Major #C.3014.AS)
ASSOCIATE IN SCIENCE DEGREE

Program Goals:
A student earning this degree will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Mechanical, Aerospace, or Manufacturing Engineering. In addition, a student earning this degree will be prepared for engineering internship opportunities.

The college has heretofore had a successful program for general engineering transfer. Associated with this program is an existing AS degree called Engineering. This existing general Engineering AS degree is being replaced with four new more specific Engineering AS degrees, this proposal being one of them. The new degrees recognize the slight differences in lower division preparation between the different types of engineering BS degrees and guide the students accordingly. These new degree proposals follow closely the recommendations of the California FDRG group for lower division engineering preparation. All courses in the new degrees are existing Clovis Community College courses that students have been using successfully to transfer to four-year engineering programs.

Program learning outcomes:
A student who successfully completes this certificate of achievement will be able to:
1. Apply knowledge of mathematics, science, and engineering fundamentals to solve engineering problems.
2. Conduct laboratory experiments. Analyze and interpret the data resulting from these experiments.
3. Make basic design decisions concerning engineering problems.
4. Communicate solutions to engineering problems using effective oral, written, and graphical methods.
5. Demonstrate knowledge of the impact of engineering solutions in a global and societal context.
6. Use the techniques, skills, and software tools of modern engineering practice.

Catalog Description:
A student earning this degree will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Mechanical, Aerospace, or Manufacturing Engineering. In addition, a student earning this degree will be prepared for engineering internship opportunities.

Required Core Courses **29**
ENGR 10 Introduction to Engineering 2
MATH 5A Math Analysis I...5
MATH 5B Math Analysis II..4
MATH 6   Math Analysis III 5
MATH 17 Differential Equations and Linear Algebra 5
PHYS 4A   Physics for Scientists and Engineers..4
PHYS 4B   Physics for Scientists and Engineers..4
Select a minimum of four courses from the following[1] **13-17**
ENGR 2   Engineering Graphics 4
ENGR 4   Engineering Materials...3
ENGR 6   Electric Circuits Analysis with Lab 4
ENGR 8   Statics 3
ENGR 40[2] Programming for Scientists and Engineers 4
Or
ENGR 5[2] Programming and Problem-Solving in MATLAB 3
Or
CSCI 40[2] Programming Concepts and Methodology I 4
CHEM 1A General Chemistry...5
PHYS 4C   Physics for Scientists and Engineers 4

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Total Units:.. **42-46**

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[1] Student should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some transfer institutions will have minimum requirements for transfer that will necessitate choosing more than 4 courses from this section.
[2] Student should complete the programming course specifically required by his or her transfer institution of choice. The choices are ENGR 40 Programming for Scientists and Engineers (4 units), ENGR 5 Programming and Problem Solving in MATLAB (3 units), and CSCI 40 Programming Concepts and Methodology I (4 units).

Advisor: Glaves

MECHANICAL, AEROSPACE, OR MANUFACTORING ENGINEERING
(Major #C.3014.CA)
CERTIFICATE OF ACHIEVEMENT

Program Goals:
A student earning this certificate of achievement will have completed the lower division STEM coursework necessary to transfer into a bachelor's degree program in Mechanical, Aerospace, or Manufacturing Engineering. In addition, a student earning this certificate of achievement will be prepared for engineering internship opportunities.

The college has heretofore had a successful program for general engineering transfer. Associated with this program is an existing AS degree called Engineering. Most engineering transfer students have heretofore transferred successfully without completing the requirements for this degree. The main reason for this has been that the high units loads in the program's STEM areas have precluded the students from taking enough general education units to meet the AS degree requirements. Engineering students at four-year universities have this same issue and are allowed by their institutions to spread their lower division general education coursework over all four years of their degree. This certificate will effectively allow our engineering transfer students to do the same thing while also earning a credential from our college that recognizes their achievement.

Our existing Engineering AS degree is being replaced by four new more specific certificates of achievement, this certificate of achievement being one of them. The new certificates of achievement recognize that students will likely transfer without fully completing lower division education requirements and also recognize the slight differences in lower division preparation between the different types of engineering BS degrees and guide the students accordingly. These new certificates of achievement proposals follow closely the recommendations of the California FDRG group for lower division engineering preparation. All courses in the new certificates of achievement are existing Clovis Community College courses that students have been using successfully to transfer to four-year engineering programs.
For students who wish to transfer in engineering and in addition earn an Associate of Science degree, the college has also developed four engineering AS degrees. These are essentially the same as the engineering certificates of achievement, but include the local general education requirements for our AS degrees.

Program learning outcomes:
A student who successfully completes this certificate of achievement will be able to:
1. Apply knowledge of mathematics, science, and engineering fundamentals to solve engineering problems.
2. Conduct laboratory experiments. Analyze and interpret the data resulting from these experiments.
3. Make basic design decisions concerning engineering problems.
4. Communicate solutions to engineering problems using effective oral, written, and graphical methods.
5. Demonstrate knowledge of the impact of engineering solutions in a global and societal context.
6. Use the techniques, skills, and software tools of modern engineering practice.

Catalog Description:
A student earning this certificate of achievement will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Mechanical, Aerospace, or Manufacturing Engineering. In addition, a student earning this certificate of achievement will be prepared for engineering internship opportunities.

Required Core Courses **29**
ENGR 10 Introduction to Engineering 2
MATH 5A Math Analysis I...5
MATH 5B Math Analysis II..4

MATH 6   Math Analysis III 5
MATH 17 Differential Equations and Linear Algebra 5
PHYS 4A   Physics for Scientists and Engineers..4
PHYS 4B   Physics for Scientists and Engineers..4
Select a minimum of four courses from the following[1] 13-17
ENGR 2   Engineering Graphics 4
ENGR 4   Engineering Materials..3
ENGR 6   Electric Circuits Analysis with Lab 4
ENGR 8   Statics 3
ENGR 40[2] Programming for Scientists and Engineers 4
Or
ENGR 5[2]   Programming and Problem-Solving in MATLAB..3
Or
CSCI 40[2]   Programming Concepts and Methodology I 4
CHEM 1A General Chemistry..5
PHYS 4C   Physics for Scientists and Engineers 4

Total Units:.. 42-46

[1] Student should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some transfer institutions will have minimum requirements for transfer that will necessitate choosing more than 4 courses from this section.
[2] Student should complete the programming course specifically required by his or her transfer institution of choice. The choices are ENGR 40 Programming for Scientists and Engineers (4 units), ENGR 5 Programming and Problem Solving in MATLAB (3 units), and CSCI 40 Programming Concepts and Methodology I (4 units).

Advisor: Glaves

INFORMATION SYSTEMS
CYBER SECURITY
 (Major #C.6932.CA)
CERTIFICATE OF ACHIEVEMENT

Program Goals:
1. Design a network topology for a medium to large enterprise, while reading and understanding the fundamental goal of Cyber Security – Confidentiality, Integrity, and Availability (CIA) of data which is transmitted on a given network and governed by federal and state regulations, and procedures.
2. Design a network security system which is configured to protect a given network, while reading, researching and considering all elements of Cyber Security such as Physical, Communication, and Network security.
3. Design and configure an Intrusion Detection System (IDS), for a typical network for a medium to large enterprise, while using the typical tools and written instructions used by Cyber Security experts to perform network sniffing, monitoring, surveillance, and enumeration of data.

Objectives:
In the process of completing this program, students will learn the following main competencies to succeed in the field of cyber security and networking:
1. Install switches, routers and hubs, and configure them while reading instructions that outline specific protocols and addressing procedures which are at risk of intrusion.
2. Read, identify and distinguish the 3 key goals of network security: Confidentiality, Integrity, and Availability (CIA), in a medium to large computer network.
3. Implement security policies and standards as required for network protection and security.
4. Secure wireless networks, and test for intrusion, as well configuring for optimal protection such as MAC filtering and traffic encryption.
5. Install and configure Intrusion Detection Systems (IDS) to meet the designed and written requirements given the range of threats in any combination of Physical, Network, or Communications elements of a given network.
6. Determine "Best Practices" in HTTPS, DNS, SMTP, and FTP servers to "harden" these resources against outside attacks,

through research, reading professional journals, and publications.

7. Secure a given network using firewalls, and proxy servers, as well as specialized programs and tools.

Program learning outcomes:

1. Evaluate the computer network and information security needs of an organization.
2. Assess cybersecurity risk management policies in order to adequately protect an organizations critical information and assets.
3. Evaluate the performance of security systems within an enterprise-level information system.
4. Troubleshoot, maintain, and update an enterprise-level information security system.
5. Implement continuous network monitoring and provide real-time security solutions.
6. Formulate, update, and communicate short- and long-term organizational cybersecurity strategies and policies.

Catalog Description:

This program provides students with the knowledge, training, and hands-on experience to pursue a career and gain professional certification (CompTIA) as an Information Technology Cyber Security Technician professional in a business, government, or education environment. Students should have a basic understanding of computer networking prior to enrolling. Students completing this program of study will be able to enter the cyber security workforce in areas such as security analyst, or penetration tester with a comprehensive understanding of computer hardware, system software, networking essentials, as well as the intermediate skills to protect computer networks against malicious attack, and to use currently available tools to perform network testing, penetration, and assessment of target networks.

Required Core Courses **20-21**
IS 15 Computer Concepts 3
IS 62 Computer & Communication Essentials – Troubleshooting and Maintenance 4
IS 63 Computer Networking Fundamentals 3
IS 70 Introduction to Information Systems Security 3
IS 71 Introduction to Cybersecurity: Ethical Hacking 3
IS 72 Computer Forensics Fundamentals 3
OT 17 Job Retention and Responsibilities 1
Or
IS 66 Office and Customer Skills for Technicians 2

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Total Units: **20-21**

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Advisor: Nabors

MECHATRONICS/INDUSTRIAL AUTOMATION
 (Major #C.8391.CA)
CERTIFICATE OF ACHIEVEMENT

Program Goals:

1. Prepare students to obtain an entry-level positions as industrial automation technicians in various local and regional industries.
2. Provide foundational training and mentorship that enables students to transfer to related four-year baccalaureate programs.

Program learning outcomes:

Upon completion of this program students will be able to:

1. Safety: Identify the hazards associated with automated machinery and determine appropriate safety methods for working in an industrial environment.
2. Troubleshooting: Utilize electrical/mechanical troubleshooting and communication skills to diagnose, repair, test, and return to service failed components.
3. Identify and Solve Problems: Identify, analyze, and solve narrowly defined technical problems determining root cause with a general understanding of industry practices.
4. System Design and Programming: Use basic understanding of programming and industrial system design to enhance systems via incremental changes in software and/or in hardware modifications.
5. Communication: Apply written, oral and graphical communication skill in both technical and non-technical environments, and identify and use appropriate technical literature.

6. Teamwork, Professionalism and Quality: Function effectively as a team member, both individually and as group, demonstrating a commitment to quality, timeliness, and continuous improvement in a professional manner. Student Selection and Fees: The program is open to all Clovis Community College students. The cost of program to students would include the required textbooks and/or online educational resources.

Catalog Description

The certificate in Mechatronics/Industrial Automation is designed to prepare students for employment as entry-level industrial automation technicians. The program prepares students for careers in the design, operation, and maintenance of industrial automation systems focusing on the local industries that utilize these technologies, such as food production, petroleum production, fabrication, and logistics. This program focuses on the application of electronics and computer technology to industrial automation systems, including instrumentation and control, industrial robotics, and process control systems. Significant emphasis is placed on project-based learning facilitated by significant laboratory work.

Required Courses... **26**
MECH 2 Mechanical Systems...3
MECH 3 Electricity and Electronics (AC &DC) 4
MECH 4 Electric Motors- Controls 4
MECH 5 Programmable Logic Controllers (PLCs)..3
MECH 19V Cooperative Work Experience, Mechatronics/Industrial Automation 3
MECH 23 Instrumentation and Process Control 3
MECH 35 Industrial Communications Network...3
MECH 45 Industrial Automation Systems 3

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Total Units:... **26**

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Advisor: Graff

Inactivated Associate in Science Degrees

Effective Spring 2019

ENGINEERING
Engineering Associate in Science Degree (#C.3010.AS)

INFORMATION SYSTEMS
Information Systems – Help Desk Associate in Science Degree (#C.693H.AS)

New Associate Degree for Transfer

Program Effective Spring 2019
(Pages 84-103 of 2018-2019 catalog)

ENVIRONMENTAL SCIENCE
ASSOCIATE IN SCIENCE IN ENVIRONMENTAL SCIENCE FOR TRANSFER DEGREE
(Major #C.6000.AS-T)

Program Goals:
The Associate in Science in Environmental Science for Transfer Degree is an interdisciplinary and multidisciplinary course of study that presents an overview of ecological issues from a scientific perspective. With a broad foundation across the natural sciences, the coursework examines the interrelated nature of environmental and social systems. This program is designed to equip students with the skills and tools to successfully use the scientific method while studying and solving environmental problems.

The Associate in Science in Environmental Science for Transfer degree is designed to demonstrate the breadth of content and disciplines that underlie environmental science and prepare students for advanced courses and projects that they will be presented with in their bachelor degree program. The Associate in Science in Environmental Science for Transfer degree promotes an understanding of basic operational principles underlying the biosphere and ecosystem through a transdisciplinary approach to understanding interaction between the biological and physical world and human institutions.

Program learning outcomes:
1. Investigate and describe specific evidence used to construct individual scientific principles.
2. Utilize scientific methodologies when solving a problem.
3. Demonstrate knowledge of how human activities impact the physical and biological environments.
4. Apply concepts, models, and quantitative techniques from mathematics, life sciences, and physical sciences to solve complex problems related to the natural world.
5. Analyze, interpret, and evaluate quantitative and qualitative evidence regarding the causes and consequences of human impacts on the environment.

Catalog Description:
Students will understand essential biological and physical processes, analyze human/environment interactions, understand different cultural perspectives on the environment, build critical thinking skills as the basis for decision making and sound value judgments, gain specialized analytical skills in at least one area of environmental science, build teamwork, leadership, conflict resolution skills, and develop effective communication skills.

Required Core Courses **13-14**
BIOL 11A Biology for Science Majors I 5
CHEM 1A General Chemistry 5
CHEM 1B General Chemistry and Qualitative Analysis 5
List A **13-14**
GEOL 1 Physical Geology 4
MATH 5A Math Analysis I 4
MATH 11 Elementary Statistics 4
Or
STAT 7 Elementary Statistics 4
List B: Select two or three courses from the following 11
ECON 1B Principles of Microeconomics 3
PHYS 2A General Physics I 4
And
PHYS 2B General Physics II 4

Or

PHYS 4A Physics for Scientists and Engineers...4

And

PHYS 4B Physics for Scientists and Engineers...4

Total units for the major.. **37-39**

Advisor: Rutledge

MECHATRONICS/INDUSTRIAL AUTOMATION

(Major #C.8391.AS)

MECHATRONICS/INDUSTRIAL AUTOMATION ASSOCIATE IN SCIENCE DEGREE

Program Goals:

1. Prepare students to obtain an entry-level positions as industrial automation technicians in various local and regional industries.
2. Provide foundational training and mentorship that enables students to transfer to related four-year baccalaureate programs.

Program learning outcomes:

Upon completion of this program students will be able to:

1. Safety: Identify the hazards associated with automated machinery and determine appropriate safety methods for working in an industrial environment.
2. Troubleshooting: Utilize electrical/mechanical troubleshooting and communication skills to diagnose, repair, test, and return to service failed components.
3. Identify and Solve Problems: Identify, analyze, and solve narrowly defined technical problems determining root cause with a general understanding of industry practices.
4. System Design and Programming: Use basic understanding of programming and industrial system design to enhance systems via incremental changes in software and/or in hardware modifications.
5. Communication: Apply written, oral and graphical communication skill in both technical and non-technical environments, and identify and use appropriate technical literature.
6. Teamwork, Professionalism and Quality: Function effectively as a team member, both individually and as group, demonstrating a commitment to quality, timeliness, and continuous improvement in a professional manner.

Student Selection and Fees: The program is open to all Clovis Community College students. The cost of program to students would include the required textbooks and/or online educational resources.

Catalog Description:

The Mechatronics/Industrial Automation Associate in Science degree in is designed to prepare students for employment as entry-level industrial automation technicians. The program prepares students for careers in the design, operation, and maintenance of industrial automation systems focusing on the local industries that utilize these technologies, such as food production, petroleum production, fabrication, and logistics. This program focuses on the application of electronics and computer technology to industrial automation systems, including instrumentation and control, industrial robotics, and process control systems. Significant emphasis is placed on project-based learning facilitated by significant laboratory work.

Required Core Courses **26**

MECH 2 Mechanical Systems...3

MECH 3 Electricity and Electronics (AC & DC) 4

MECH 4 Electric Motors – Controls 4

MECH 5 Programmable Logic Controllers (PLCs)...3

MECH 19V Cooperative Work Experience, Mechatronics/Industrial Automation 3

MECH 23 Instrumentation and Process Control 3

MECH 35 Industrial Communications Networks...3

MECH 45 Industrial Automation Systems 3

Total units for the major.. **26**

Advisor: Graff

New Courses Effective Fall 2018
(Pages 104-153 of 2018-2019 catalog)

HONORS (HONORS)
2A   HONORS SEMINAR: COMMUNICATION AND CRITICAL THINKING
1 unit, 1 lecture hour
ADVISORIES: Eligibility for English 1A or English 1AH.
A seminar exploring a path of inquiry under the overall topic of communications or critical thinking. This seminar is intended for honors students of the Clovis Community College Honors program to stimulate intellectual curiosity, discussion, and analysis. This seminar may include field trips and guest speakers. (A, CSU)

Corrected Courses Effective Fall 2018
(Pages 104-153 of 2018-2019 catalog)

INFORMATION SYSTEMS (IS)
70   INTRODUCTION TO INFORMATION SYSTEMS SECURITY
3 units, 3 lecture hours, 1 lab hour (Pass/No Pass)
ADVISORY: IS 63, CCNA, CompTIA Networking +, or experience with networking. Eligibility for English 1A.
Correction: Corrected lab hours from 2 to 1

Courses Approved for University of California Transfer Course Articulation (UCTCA) Effective Fall 2018
(Pages 104-153 of 2018-2019 catalog)

The following courses have been approved for University of California Transfer Course Articulation (UCTCA) effective with the Fall 2018 semester.

1. Anthropology 4, Introduction to Archaeology
2. Art 8, Beginning Figure Drawing
3. Art 26, Arts of Africa, Oceania, Indigenous North America, and the Pre-Columbian Americas
4. Communication 2, Interpersonal Communication
5. Dance 12A, Ballet
6. Engineering 5, Programming and Problem-Solving in MATLAB
7. Engineering 10, Introduction to Engineering
8. Geography 1, Physical Geography
9. Geography 2, Cultural Geography
10. Geography 10, Introduction to Geographic Information Systems and Techniques, with Lab
11. Geography 20, California Geography
12. History 31, A Survey of the History of Africa
13. History 33, A Survey of Latin American History
14. Physical Education 32B, Competitive Cross-Country
15. Physical Education 32C, Off-Season Conditioning for Cross-Country

Revised Courses Effective Spring 2019
(Pages 104-153 of 2018-2019 catalog)

GEOGRAPHY (GEOG)
6 World Regional Geography
3 units, 3 lecture hours (Pass/No Pass)
ADVISORY: Eligibility for English 1A.
Change: Corrected grading basis to Pass/No Pass option.

Revised Courses Effective Summer 2019
(Pages 104-153 of 2018-2019 catalog)

INFORMATION SYSTEMS (IS)
50A Introduction to Game Programming
This course introduces students to game development concepts, including the theory of game design, mathematical concepts needed to create 3D games, and how to create a new game using a game engine.
Change: Removed prerequisite of Information Systems 15, changed advisories to, "Information Systems 15 or Computer Science 40, Mathematics 4A, and Eligibility for English 125 and 126;" revised catalog description, student learning outcomes, objectives, lecture and lab content, and updated textbooks.

50B Intermediate Game Programming
This course provides students with intermediate-level game design, level creation, and programming skills. Over the course of the semester students will cooperatively build a moderately advanced game for the PC or web.
Change: Removed prerequisite of Information Systems 15 and added prerequisite of Information Systems 50A, removed all advisories, revised catalog description, student learning outcomes, objectives, lecture and lab content, and updated textbooks.

Changes to Personnel Effective Spring 2019
(Pages 157 - 163 of 2018-2019 catalog)

Board of Trustees
President Deborah J. Ikeda
Vice-President Eric Payne
Secretary Annalisa Perea
Trustee Richard Caglia
Trustee Magdalena Gomez
Trustee Bobby Kahn
Trustee John Leal

Changes to Clovis Community College Administration

Interim Vice-President of Instruction – Spring 2019 Dr. Kimberlee Messina

Clovis Community College Administration
Numbers in parenthesis indicate year of appointment at State Center Community College District.

Remove:
DORSEY-ROBINSON, SYLVIA (2018)
Interim Vice-President of Instruction (1 semester temp)
B.S., M.S., Old Dominion University, Norfolk VA

Add:
MESSINA, KIMBERLY S. (2019)
Interim Vice-President of Instruction (1 semester temp)
Ed.D., University of California, Davis
M.A. B.A., California State University, Sacramento

Creating Opportunities
One Student at a Time

Clovis Community College is the college of choice for academic excellence, innovation, and student achievement.