

# HARTNELL COLLEGE



**2011-2012  
CATALOG ADDENDUM**

# Hartnell College 2011-2012 Catalog Addendum



This addendum to the 2011-2012 Hartnell College Catalog contains changes that offer new educational opportunities for students. These updates were approved after the 2011-2012 College Catalog went to press in May and are effective for Fall 2011 and Spring 2012.

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### ACCURACY STATEMENT

The Hartnell Community College District has made every reasonable effort to ensure that information in this catalog is accurate. Courses and programs that are offered, along with other matter contained herein, are subject to change without notice by Hartnell College administration for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to add to, amend, or repeal any of their rules, regulations, policies, and procedures, consistent with application laws.

### HARTNELL COMMUNITY COLLEGE DISTRICT GOVERNING BOARD OF TRUSTEES

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### OPEN ENROLLMENT

It is the policy of Hartnell Community College District that, unless health, safety, or limited facilities is a factor in the conduct of a course, every course, course section, or class, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets the required prerequisites for such course, course section, or class.

## NEW COURSE LISTINGS

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### COURSE GRADING

- If no grading system is specified for a course, a letter grade will be issued.
  - If Pass/No Pass only is specified, a P or NP will be issued.
  - If Pass/No Pass option is indicated, a letter grade will be issued unless the student files a petition to complete the course with P/NP option.
  - No Grades will be issued for non-credit courses.
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### AGRICULTURE

#### ABT-81. Integrated Pest Management Principles in Entomology (3)

**Lec 2 Hrs Lab 3 Hrs**

Introduction to insects and mites of economic importance to agriculture. Covers the morphology, taxonomy, identification, life cycles, hosts, habitat relationships, and control methods of insects of economic importance. Collection and labeling of specimens will be required. Field trips required.

### PHYSICAL EDUCATION

#### PETH-5. Sport in Society (3)

**Lec 3 Hrs**

An overview of the historical development of sport and current roles of sport in society. Includes interaction of sport with societal values and ethics and outcomes affecting professional and collegiate sports.

### COMPUTER SCIENCE AND INFORMATION SYSTEM

#### CSS-41. Operating Systems (4)

**Prerequisite:** CSS-1 with a grade of "C" or better

**Lec 3 Hrs; Lab 3Hrs**

Introduces the fundamentals of operating systems design and implementation. Topics include an overview of the components of an operating system, mutual exclusion and synchronization, implementation of processes, scheduling algorithms, memory management, file systems, basic concepts of operating systems and system programming, virtual memory, program loading and linking, file and I/O subsystems and utility programs. Appropriate for students preparing for Computer Science and Information Systems course sequences. Hands-on exercises with Windows, UNIX, Linux and Mac OS. (This course is equivalent to the Association of Computing Machinery Operating Systems course.)  
[CSU; UC]

### THEATRE ARTS

#### THA3. History of the Theatre (3)

**Lec 3 Hrs**

The study of the history of theatre from the Origins of Theatre through the 19th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance.

### EARLY CHILDHOOD EDUCATION

#### ECE-193. Topics in ECE: Early Childhood Leadership, Advocacy, Parent Relations, and Management (.5)

**Pass/No Pass Only**

**Lec 0.5 hrs**

Designed to address current trend in ECE leadership, advocacy, parent relations, and management. Includes updates on government mandates, laws, and regulations affecting ECE programs and workforce training. May be taken up to 4 times for credit.

#### ECE-194. Topics in ECE: Early Childhood Philosophies, Curriculum and Innovative Teaching Methodologies (.5)

**Pass/No Pass Only**

**Lec 0.5 hrs**

Designed to address current trends in ECE philosophies, curriculum, and innovative teaching methodologies. This course will reflect updates of government mandates and regulations affecting curricular trends. May be taken up to 4 times for credit.

## AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT—ASSOCIATE OF SCIENCE DEGREE

### PROGRAM DESCRIPTION

This certificate or degree prepares students for positions in management of automotive technology service and repair facilities. Management positions include shop supervisors and managers, insurance estimators, parts manager, and factory products representatives. Classes are designed to provide a broad exposure to industry standards and practices.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major. Students can also access major and transfer information for California State Universities and University of California at [www.assist.org](http://www.assist.org).

As a result of ongoing changes in technology, the need to expand competencies, and changing certification or transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

**FOR MORE INFORMATION, CONTACT:** Valentin Rodriguez at 831-770-7078, [vrodriquez@hartnell.edu](mailto:vrodriquez@hartnell.edu), Alisal Campus

### PROGRAM OUTCOMES:

Upon successful completion of Automotive Technology program, a student should be able to:

- demonstrate skills and knowledge to inspect and repair all major systems found in current automobiles.
- complete accurate work orders of automobile repairs related to service history, analysis of problems and description of correct repairs.
- research applicable vehicle and service information using automobile manuals, pertinent websites, and diagnostic equipment to identify, analyze, and to correct problems of all major automobile systems.

A minimum of **60.0 semester** units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

✓	REQUIRED MAJOR COURSES	Course No.	Course Title	Units
	Required Major Course	AUT-50	Introduction to Automotive Repair	4.0
	Required Major Course	AUT-51	Auto Engine Performance and Diagnostics	4.0
	Required Major Course	AUT-71	Automotive Brakes and Systems	4.0
	Required Major Course	AUT-72	Fuel Systems and Emission Control	4.0
	Required Major Course	AUT-73	Automotive Electricity and Electronics	4.0
	Required Major Course	AUT-83	Automotive Wheel Alignment and Suspension	4.0
	Required Major Course	AUT-179	Automotive Business and Shop Management	4.0
	Required Major Course	AUT-110	Automotive Climate Control	4.0
	Required Major Course	BUS-32	Introduction to Business	3.0
	Required Major Course	CSS-43	Computer Systems and Information Literacy	4.0
			<b>SUBTOTAL UNITS (39.0)</b>	
✓	REQUIRED GENERAL EDUCATION COURSES	Course No.	Course Title	Units
	<b>Natural Sciences</b> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)			
	<b>Social &amp; Behavioral Sciences</b> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)			
	<b>Humanities</b> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)			
	<b>Ethnic Groups in the United States</b> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)			
	<b>Language and Rationality (9 Units)</b>			
	<b>A. Written Composition</b>	ENG-1A	College Composition and Reading	3.0
	<b>B. Communication and Analytical Thinking</b>	MAT-123*	Intermediate Algebra	5.0
	<b>Communication and Analytical Thinking</b> (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)			
			<b>General Education</b>	<b>21.0</b>
			<b>Automotive Technology—Automotive Shop Management Required Major Courses</b>	<b>39.0</b>
			<b>Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0</b>	
			<b>TOTAL UNITS</b>	<b>60.0</b>

\*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a 'C' or better or a score of 70% or greater on the mathematics competency exam

### **AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT—CERTIFICATE OF ACHIEVEMENT**

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

✓	REQUIRED MAJOR COURSES	Course No.	Course Title	Units
	Required Major Course	AUT-50	Introduction to Automotive Repair	4.0
	Required Major Course	AUT-51	Auto Engine Performance and Diagnostics	4.0
	Required Major Course	AUT-71	Auto Brakes Systems and Controls	4.0
	Required Major Course	AUT-72	Fuel Systems and Emissions Control	4.0
	Required Major Course	AUT-73	Automotive Electricity and Electronics	4.0
	Required Major Course	AUT-83	Automotive Wheel Alignment and Suspension	4.0
	Required Major Course	AUT-179	Automotive Business and Shop Management	4.0
	Required Major Course	ENG-101*	Intermediate Composition and Reading	(3.0)
		or	or	or
		ESL-101*	Academic Writing & Reading II	(5.0)
	Required Major Course	MAT-123**	Intermediate Algebra	(5.0)
			<b>SUBTOTAL UNITS (≥ 36.0)</b>	

\*Eligibility for ENG-1A fulfills this requirement.

\*\*Completion of any math in which MAT-123 is a prerequisite with a grade of "C" or better.

### **AUTOMOTIVE TECHNOLOGY—ADVANCED AUTOMOTIVE TECHNICIAN—CERTIFICATE OF ACHIEVEMENT**

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

✓	REQUIRED MAJOR COURSES	Course No.	Course Title	Units
	Required Major Course	AUT-50	Introduction to Automotive Repair	4.0
	Required Major Course	AUT-51	Auto Engine Performance and Diagnostics	4.0
	Required Major Course	AUT-72	Fuel Systems and Emissions Controls	4.0
	Required Major Course	AUT-73	Auto Electricity and Electronics	4.0
	Required Major Course	AUT-86	Automotive Electronics and Engine Performance	4.0
	Required Major Course	AUT-120	Introduction to Alternate Fuel and Electric Hybrid Vehicles	2.0
	Required Major Course	AUT-121	Hybrid, Electric & Fuel-Cell Vehicles	2.0
	Required Major Course	ELE-52	Electronic Fundamentals	5.0
	Required Major Course	ELE-151	DC Circuit Analysis	2.5
	Required Major Course	AUT 271+	California BAR Clean Air Car Course	5.0
	Required Major Course	ENG-101*	Intermediate Composition and Reading	(3.0)
		or	or	or
		ESL-101*	Academic Writing & Reading II	(5.0)
	Required Major Course	MAT-123**	Intermediate Algebra	(5.0)
			<b>SUBTOTAL UNITS (≥ 41.5)</b>	

\*Eligibility for ENG-1A fulfills this requirement.

\*\*Completion of any math in which MAT-123 is a prerequisite with a grade of "C" or better.

+ AUT 271 content is a state requirement for BAR certification.

## COMMUNICATION STUDIES— ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER DEGREE

(Pending Chancellor's Office Approval)

### PROGRAM DESCRIPTION

The Associate in Arts in Communication Studies for Transfer allows students to focus their major course work and required electives to meet the needs of business, interpersonal, and public communication; and to demonstrate communicative competence. A degree in Communication Studies can lead to a career (or further study) in public relations, teaching, consulting, broadcasting, law ministry, public administration or any field in which communication skills are highly valued. Upon successful completion of the Associate in Arts in Communication Studies for Transfer, a student should be able to: conceive, develop and deliver a focused, cogent, and clear presentation; explain the transactional and transformative nature of human communication; and research, organize and write a paper concerning the development, implementation, and effective use of various communication theories.

**FOR MORE INFORMATION, CONTACT:** Jason Hough at 831-755-6994, [jhough@hartnell.edu](mailto:jhough@hartnell.edu), CAB 355

### PROGRAM OUTCOMES

Upon successful completion of the Communication Studies Associate's Degree program, a student should be able to:

- Conceive, develop and deliver a focused, cogent, and clear oral presentation.
- Explain the transactional and transformative nature of human communication.
- Research, organize, and write a paper concerning the development, implementation, and effective use of various communication theories.

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer", a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete:

- Minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 80 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 98 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

REQUIRED MAJOR COURSES	Course No.	Course Title	Units
Required Major Course	SPE-1A	Essentials of Public Speaking	3.0
Required Major Course	SPE-3	Introduction to Communication	3.0
Required Major Course	SPE-8	Interpersonal Communication	3.0
Required Major Course	SPE/COU-35	Intercultural Communications	3.0
Required Major Course	SPE-9*	Argumentation and Debate	3.0
<b>SUBTOTAL UNITS (12.0)</b>			
RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following:)	Course No.	Course Title	Units
Restricted Major Elective	ANT-2	Introduction to Anthropology: Cultural	3.0
Restricted Major Elective	ENG-2	Critical Thinking and Writing	3.0
Restricted Major Elective	PSY-2	General Psychology	3.0
Restricted Major Elective	SOC-1	Introduction to Sociology	3.0
Restricted Major Elective	SPE/BUS-5	Introduction to Organizational Communication	3.0
<b>SUBTOTAL UNITS (6.0)</b>			
REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)			Units
Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:			34.0-39.0
A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR			
B. Minimum units to meet IGETC (34-37.00 units) certification requirements			
Communication Studies Required Major and Restricted Electives			18.0
Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0			
<b>TOTAL</b>			<b>(≥ 60.0)</b>

\*Pending Approval of New Course

### Students can double-count required degree courses and courses for General Education

**TRANSFER STUDENTS:** Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.

## MATHEMATICS—ASSOCIATE IN SCIENCE IN MATHEMATICS FOR TRANSFER DEGREE

### PROGRAM DESCRIPTION

The Associate in Science in Mathematics for Transfer offers course work in all levels of mathematics from arithmetic through differential equations and linear algebra. Students seeking improvement in their basic mathematical skills and those desiring development of advanced mathematical methods can all find meaningful activities in the Associate in Science in Mathematics for Transfer. While there are job opportunities in pure mathematics, there are even more in applied mathematics, statistics, engineering, and other technical fields relying heavily on mathematics. Positions for which four-year graduates in mathematics are qualified can be found in the fields of business, computers, teaching, and research.

**FOR MORE INFORMATION, CONTACT:** Leticia Contreras at 831-770-7053, [lcontreras@hartnell.edu](mailto:lcontreras@hartnell.edu), CAB 251  
Greg Perkins at 831-755-6705, [gperkins@hartnell.edu](mailto:gperkins@hartnell.edu), CAB 253

### PROGRAM OUTCOMES

Upon successful completion of the Mathematics Associate's Degree program, a student should be able to:

- demonstrate proficiency in solving mathematical problems involving major concepts, theories, and principles including, but not limited to
  - applying derivatives and integrals
  - solving 2nd order differential equations
  - constructing basic mathematical proofs
- analyze data using appropriate technology to enhance mathematical understanding.

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer", a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete:

- Minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 80 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 98 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

✓	REQUIRED MAJOR COURSES	Course No.	Course Title	Units
	Required Major Course	MAT-3A <sup>†</sup>	Analytic Geometry and Calculus I	4.0
	Required Major Course	MAT-3B <sup>†</sup>	Analytic Geometry and Calculus II	4.0
	Required Major Course	MAT-3C	Analytic Geometry and Calculus III	4.0
			<b>SUBTOTAL UNITS (12.0)</b>	
✓	RESTRICTED MAJOR ELECTIVES-Group 1 (Select a minimum of 3.0 units from the following: )	Course No.	Course Title	Units
	Restricted Major Elective	MAT-4	Linear Algebra	3.0
	Restricted Major Elective	MAT-5	Differential Equations	3.0
			<b>SUBTOTAL UNITS (3.0)</b>	
✓	RESTRICTED MAJOR ELECTIVES-Group 2 (Select one additional course from the following: )	Course No.	Course Title	Units
	Restricted Major Elective	MAT-4	Linear Algebra	3.0
	Restricted Major Elective	MAT-5	Differential Equations	3.0
	Restricted Major Elective	PHY-4A	General Physics/Mechanics	4.0
	Restricted Major Elective	CSS-2A	Object Oriented Programming	4.0
	Restricted Major Elective	MAT-13	Elementary Statistics	5.0
			<b>SUBTOTAL UNITS (≥ 6.0)</b>	
			<b>SUBTOTAL UNITS (≥ 18.0)</b>	
	REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)			Units
	Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:			34.0-39.0
	A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR			
	B. Minimum units to meet IGETC (34-37.00 units) certification requirements			
			Mathematics Required Major and Restricted Electives	18.0-20.0
			<b>Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</b>	
			<b>TOTAL</b>	<b>(≥ 60.0)</b>

**Students can double-count required degree courses and courses for General Education**

**TRANSFER STUDENTS:** Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.