Business, Computer Science and Applied Technologies

Course Number	Course Title	Order Number	Student Learning Outcome
ACCT 1A	Financial Accounting I	1	Demonstrate a knowledge of double entry accounting for business transactions and adjustments and prepare, explain and analyze financial statements using GAAP.
ACCT 1A	Financial Accounting I	2	Analyze fundamental business concepts, how businesses operate, how accounting serves them and identify ethical issues in an accounting context.
ACCT 1AH	Financial Accounting I - HONORS	1	Demonstrate a knowledge of double entry accounting for business transactions and adjustments and prepare, explain and analyze financial statements using GAAP.
ACCT 1AH	Financial Accounting I - HONORS	2	Analyze fundamental business concepts, how businesses operate, how accounting serves them and identify ethical issues in an accounting context.
ACCT 1B	Financial Accounting II	1	Demonstrate a knowledge of the users of accounting information and forms or business ownership, risks and capitalization of each and prepare, analyze and evaluate the financial structure of a firm using corporate financial statements (and include the statement of cash flows).
ACCT 1B	Financial Accounting II	2	Analyze and evaluate the capitalization of a firm using debt and equity and apply net present value methodology to the analysis.
ACCT 1BH	Financial Accounting II - HONORS	1	Demonstrate a knowledge of the users of accounting information and forms or business ownership, risks and capitalization of each and prepare, analyze and evaluate the financial structure of a firm using corporate financial statements (and include the statement of cash flows).
ACCT 1BH	Financial Accounting II - HONORS	2	Analyze and evaluate the capitalization of a firm using debt and equity and apply net present value methodology to the analysis.

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ACCT 1C   Managerial Accounting

1 Identify elements of cost for a business and explain and analyze how costs are allocated and assessed for various users. Compare and contrast the cost acct system for a manufacturer, merchandiser and service firm and distinguish the differences and similarities between financial reporting and cost accounting and utilize npv and irr for evaluating the financial viability of a business decision.

ACCT 1CH   Managerial Accounting - HONORS

1 Identify elements of cost for a business and explain and analyze how costs are allocated and assessed for various users. Compare and contrast the cost acct system for a manufacturer, merchandiser and service firm and distinguish the differences and similarities between financial reporting and cost accounting and utilize npv and irr for evaluating the financial viability of a business decision.

ACCT 51A   Intermediate Accounting

1 Assess in a comprehensive manner the conceptual foundations and rationale that underlie accounting applications and critique the effects of transactions and events on an entity's financial condition.

ACCT 51B   Intermediate Accounting

1 Demonstrate the ability to apply professional knowledge of the role of accountants in providing and ensuring the integrity of financial and other information relating to the equity and/or debt capitalization of a company.

ACCT 52   Advanced Accounting

1 Demonstrate knowledge of business combinations; prepare, explain and analyze consolidating workpapers and financial statements.

ACCT 52   Advanced Accounting

2 Demonstrate knowledge of governmental, not-for-profit, and partnership accounting; and demonstrate an ability to properly record related transactions and prepare related financial statements.

ACCT 58   Auditing

1 List the 10 GAASs (Generally Accepted Auditing Standards) and explain how and why they are followed.

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ACCT 58   Auditing   2 Demonstrate knowledge of how GAAS are integrated
                                                             throughout the financial audit examination process.

ACCT 58   Auditing   3 Demonstrate knowledge of a systematic audit approach using
                                                             the three major underlying and interlinked concepts: audit risk,
                                                             audit materiality, and audit evidence.

ACCT 64   Payroll and Business Tax Accounting   1 Research payroll tax laws and evaluate accounting options to
                                                             comply with these laws.

ACCT 64   Payroll and Business Tax Accounting   2 Produce payroll tax reports and related journal entries.

ACCT 66   Cost Accounting   1 Identify, describe, and explain the way managers use cost
                                                             accounting information to create value, to make decisions, and
                                                             to evaluate performance in organizations and identify current
                                                             trends in cost accounting and how they affect organizational
                                                             decisions.

ACCT 66   Cost Accounting   2 Define basic cost behaviors and explain how material, labor,
                                                             and overhead costs are applied to a product at each stage of
                                                             the production process and explain the concept of activity-
                                                             based cost management and demonstrate its use for
                                                             operational decisions.

ACCT 67A   Federal Income Tax   1 Demonstrate knowledge of how to assess and evaluate
                                                             information required to file a federal tax return and be able to
                                                             prepare and analyze an individual income tax return from
                                                             various income sources, adjustments to income, itemized
                                                             deductions and tax credits.

ACCT 67B   Advanced Tax Accounting I   1 Demonstrate a knowledge of how to apply tax law for the
                                                             preparation of individual tax returns for gross income and
                                                             taxable income purposes, depreciation, depletion and
                                                             amortization and classify and determine federal and state tax
                                                             treatment for individuals with gains, losses, employee and self-
                                                             employment income and expense.

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ACCT 68   Advanced Tax Accounting II   1 Explain, differentiate, analyze and evaluate the differences between the taxation of individuals, partnerships, corporations and trusts and prepare and analyze a corporate, partnership, trust and gift tax federal return.

ACCT 73   Fraud Detection and Deterrence   1 Demonstrate competency in critical thinking by deconstructing various frauds to determine how the frauds could be perpetrated, detected, and mitigated.

ACCT 74   Accounting Ethics   1 Demonstrate competency in identifying, assessing and interpreting ethical issues in accounting and explain the costs and risks of unethical practices in business from the point of view of all relevant stakeholders.

ACCT 75   Accounting for Government and Nonprofit Entities   1 Demonstrate knowledge of the accounting cycle from transactions through financial statement preparation and analysis for governmental and nonprofit organizations.

ACCT 86   Computer Accounting Systems   1 Convert a manual accounting system to a computerized system and analyze the differences between the two.

ACCT 86   Computer Accounting Systems   2 Using a generic accounting software, demonstrate the understanding of accounting and accounting software needed to enter transactions and complete the accounting cycle.

ACCT 86   Computer Accounting Systems   3 Utilize the resulting output from an accounting software system to demonstrate a knowledge of financial management.

ACCT 87AH Computerized Accounting Programs I (Peachtree - Window   1 Using an existing Accounting Software Program, demonstrate the understanding of accounting and accounting software necessary to enter transactions and complete the accounting cycle.

ACCT 88   Excel Spreadsheets for Accounting   1 Evaluate accounting problems; then design and construct Excel spreadsheets to solve those problems.

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ACCT 105 Basic Financial Accounting Procedures

1 Analyze basic business transactions and record them using double-entry accounting by journalizing, posting entries to the general ledger and preparing relevant internal and external financial statements to include the evaluation of merchandising transactions using perpetual and periodic inventory systems and incorporating various cost flow methods.

APRN 50A Introduction to Automotive Principles

1 Student will be able to answer correctly, selected questions on the final exam concerning engine theory, lubrication, and basic electrical fundamentals.

APRN 50B Applied Automotive Principles

1 Student will be able to answer correctly, selected questions on the final exam concerning engine service, cooling system maintenance and battery testing.

APRN 51A Introduction to Automotive Principles - Chassis Systems

1 Student will be able to answer correctly, selected questions on the final exam concerning drive line theory, clutch and transmission service and diagnosis.

APRN 60 Automotive Electrical Systems

1 Demonstrate the ability to diagram and construct simple electrical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.

APRN 60A Electrical Schematic Diagnosis

1 Student will diagnose an open circuit problem in which all or part of the circuit is inoperative.

APRN 60B Automotive Electronics

1 Student will identify and appraise the operation of engine control systems where computer management is prevalent.

APRN 60C Automotive Ignition, Fuel and Emission Systems

1 Student will identify major ignition and fuel system components.

APRN 60D Ignition Analysis and Oscilloscope Diagnosis

1 Student will identify the purpose of an automotive ignition system.

APRN 60E Automotive Fuel Injection

1 Student will describe the principles of electronic fuel injection.

APRN 60F No-Start Diagnosis

1 Student will identify basic internal combustion principles for the gasoline engine.

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APRN 60G Advanced Scan Tool Diagnosis   1 Student will identify the purpose of an automotive scan tool.

APRN 60H Advanced Drivability and Onboard Diagnostics   1 Student will describe the onboard self-test and diagnostic capabilities of various manufacturers' vehicle control systems.

APRN 60J   Advanced Lab Scope and Waveform Diagnosis   1 Student will understand the various designs and applications of the diagnostic oscilloscope and power graphing meter.

APRN 60N Hybrid Vehicle Safety and Maintenance   1 Student will identify the function of an automotive hybrid propulsion system.

APRN 62A Automotive Suspension, Steering and Alignment   1 Students will understand proper under car inspection procedures.

APRN 63   Automatic Transmissions and Transaxles   1 The student will show an understanding of how a torque converter works.

APRN 63   Automatic Transmissions and Transaxles   2 The student will will show an understanding of the inputs to transmission that create both up and downshifts.

AUTO 50A Introduction to Automotive Principles   1 Student will be able to answer correctly, selected questions on the final exam concerning engine theory, lubrication, and basic electrical fundamentals.

AUTO 50B Applied Automotive Principles   1 Student will be able to answer correctly, selected questions on the final exam concerning engine service, cooling system maintenance and battery testing.

AUTO 51A Introduction to Automotive Principles - Chassis Systems   1 Student will be able to answer correctly, selected questions on the final exam concerning drive line theory, clutch and transmission service and diagnosis.

AUTO 51B Applications of Automotive Principles - Chassis Systems   1 Student will be able to answer correctly, selected questions on the final exam concerning tire service including balancing, disc and drum brake service, and front and rear suspension service.

AUTO 53A Automotive Mechanisms   1 Demonstrate the ability to diagram and construct compound mechanical and pneumatic machines, calculating the mechanical advantage for the individual componants as well as the complete system.

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AUTO 53B	Automotive Electromechanical Systems	1	Demonstrate the ability to diagram and construct simple electromechanical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.
AUTO 53B	Automotive Electromechanical Systems	2	Develop a testing sequence to diagnose open , shorted, and grounded electromechanical circuits.
AUTO 57A	Career Research and Employment in the Automotive Indust	1	After studying the various parts of the automotive industry and learning job interview skills, the student will participate in an 'in-class' job interview.
AUTO 60	Automotive Electrical Systems	1	Demonstrate the ability to diagram and construct simple electrical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.
AUTO 60	Automotive Electrical Systems	2	Develop a testing sequence to diagnos inoperative charging, cranking, and battery circuits.
AUTO 60A	Electrical Schematic Diagnosis	1	Student will diagnose an open circuit problem in which all or part of the circuit is inoperative.
AUTO 60B	Automotive Electronics	1	Student will identify and appraise the operation of engine control systems where computer management is prevalent.
AUTO 60C	Automotive Ignition, Fuel and Emission Systems	1	Student will identify major ignition and fuel system components.
AUTO 60D	Ignition Analysis and Oscilloscope Diagnosis	1	Student will identify the purpose of an automotive ignition system.
AUTO 60E	Automotive Fuel Injection	1	Student will describe the principles of electronic fuel injection.
AUTO 60F	No-Start Diagnosis	1	Student will identify basic internal combustion principles for the gasoline engine.
AUTO 60G	Advanced Scan Tool Diagnosis	1	Student will identify the purpose of an automotive scan tool.
AUTO 60H	Advanced Drivability and Onboard Diagnostics	1	Student will describe the onboard self-test and diagnostic capabilities of various manufacturers' vehicle control systems.

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AUTO 60J   Advanced Lab Scope and Waveform Diagnosis   1 Student will understand the various designs and applications of the diagnostic oscilloscope and power graphing meter.

AUTO 60K   Automotive Body Electrical Systems   1 The student will show an understanding of a resistive multiplexed switch circuits operation and diagnosis through a written essay.

AUTO 60N   Hybrid Vehicle Safety and Maintenance   1 Student will identify the function of an automotive hybrid propulsion system.

AUTO 61A   Automotive Brake Systems   1 Students will understand proper brake inspection procedures.

AUTO 61B   Electronically Controlled Brake Systems   1 The student will be able to describe the differences in the two major types of wheel speed sensors used on cars and light trucks as well as how they function, and how to diagnose a failure of the component.

AUTO 62A   Automotive Suspension, Steering and Alignment   1 Students will understand proper under car inspection procedures.

AUTO 62A   Automotive Suspension, Steering and Alignment   2 Students will understand proper vehicle wheel alignment procedures.

AUTO 62B   Advanced Wheel Alignment   1 The learner will understand the concepts and be able to diagnose vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer, and steering return concerns; determine necessary action.

AUTO 63   Automatic Transmissions and Transaxles   1 The student will show an understanding of how a torque converter works.

AUTO 63   Automatic Transmissions and Transaxles   2 The student will will show an understanding of the inputs to transmission that create both up and downshifts.

AUTO 63A   Advanced Manual Drive Train   1 The student will understand the workings of a manual transmission clutch assembly.

AUTO 63A   Advanced Manual Drive Train   2 The student will be able to calculate first and second order frequency vibrations for a rear wheel drive propeller shaft.

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AUTO 63D	Transmission Diagnostic and Repair Techniques	1	The student will show an understanding of the operation of transmission solenoids and the corresponding voltage values for diagnostic purposes.
AUTO 64	Automotive Machining and Engine Repair	1	Student should be able to answer selected questions on the final concerning engine theory, valve events, engine diagnostics, and engine assembly.
AUTO 64HF	High Performance Engine Preparation	1	Student will answer correctly, selected questions on the final exam concerning blueprinting operations, engine theory, camshaft design, parts reliability upgrades. These are areas essential to the understanding of performance engines.
AUTO 65P	Clean Air Car Course	1	Student will be able to answer correctly, selected questions on the final exam concerning Bureau of Automotive Repair rules, regulations, and proper procedures to perform a smog check in the state of CA.
AUTO 65W	Advanced Clean Air Car Course	1	Student will be able to answer correctly, selected questions on the final exam concerning repairs to lower Oxides of Nitrogen (Nox) failures and procedures to perform an acceleration simulation mode (ASM) smog inspection using a dynomometer.
AUTO 66	Automotive Air Conditioning	1	Students will understand proper refrigerant recovery, recycling, and handling procedures.
AUTO 67A	Hybrid Electric Vehicles	1	Student will identify the function of an automotive hybrid propulsion system.
AUTO 67B	Plug-In Electric Vehicle Technology	1	Demonstrates the ability to safely maintain and service a vehicle that uses a high voltage battery as a fuel source for the main propulsion.
AUTO 67J	Introduction to Automotive and Light Truck Diesel Systems	1	Demonstrate the ability to understand diesel theory
AUTO 67J	Introduction to Automotive and Light Truck Diesel Systems	2	Develop a testing system to systematically trouble shoot diesel fuel systems

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AUTO 91A Automotive Brake Systems

1 Given a vehicle and tools, you are to remove one dual servo brake assembly from the vehicle, inspect and lubricate the brake assembly as needed, and reinstall the dual servo brake assembly in the vehicle, according to recognized industry standards in 30 minutes.

AUTO 91A Automotive Brake Systems

2 Given a vehicle and tools, you are to remove one tire, wheel, and brake caliper assembly from the vehicle, turn one rotor on the car as needed, and reinstall the tire, wheel, and brake caliper assembly on the vehicle, according to recognized industry standards.

AUTO 91A Automotive Brake Systems

3 Given a brake drum and tools, you are to setup the brake drum on the bench lathe, measure and turn the drum as needed according to recognized industry standards in 30 minutes.

AUTO 91A Automotive Brake Systems

4 Given a vehicle and tools, you are to perform a complete brake inspection, according to recognized industry standards in 30 minutes.

AUTO 92A Automotive Steering and Suspension

1 Given a vehicle and tools, you are to remove the strut assembly from the vehicle, remove and replace the strut from the coil spring, and reinstall the strut assembly in the vehicle, according to recognized industry standards in 30 minutes.

AUTO 92A Automotive Steering and Suspension

2 Given a vehicle and tools, you are to perform a chassis inspection on a front wheel drive vehicle according to recognized industry standards in 30 minutes.

AUTO 92A Automotive Steering and Suspension

3 Given a vehicle and tools, you are to perform a chassis inspection on a rear wheel drive vehicle according to recognized industry standards in 30 minutes.

AUTO 92A Automotive Steering and Suspension

4 Given a vehicle and tools, you are to remove, mount and balance, and reinstall two tire and wheel assemblies, according to recognized industry standards in 30 minutes.

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AUTO 92B Automotive Alignment

1 Given a vehicle and tools, you are to hook up the John Bean Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.

AUTO 92B Automotive Alignment

2 Given a vehicle and tools, you are to hook up the Hunter Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.

AUTO 92C Automotive Electronic Chassis Controls

1 The learner will be able to test and diagnose components of electronically controlled suspension systems using a scan tool; determine necessary action.

AUTO 93A Automotive Final Drive Train

1 The student will be able to demonstrate the ability to measure the critical elements of a selected differential, analyze the readings, make the necessary adjustments as well as the skill to disassemble and reassemble the unit.

AUTO 93B Standard Transaxles

1 The student will show their understanding of the powerflow through a standard transaxle.

AUTO 93C Automatic Transmissions

1 The student will be able to describe in an essay form, the function of an automatic transmission torque converter. They must show a knowledge of the components and their function as well as an understanding of of the relationship between them. A description of what each component does during acceleration, cruise, and converter lock up must be included.

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AUTO 93C Automatic Transmissions

2 The student will completely disassemble an automatic transmission and then reassemble the same unit replacing any needed parts. The transmission will then have to function as designed on the transmission dynomometer in the shop.

AUTO 93D Automatic Transaxles

1 The student will show an understanding of how a torque converter works.

AUTO 93D Automatic Transaxles

2 The student will will show an understanding of the inputs to transission that create both up and downshifts.

AUTO 93E Diagnostic Techniques

1 The student will be able to retrieve a transmission related fault code from the on board computer system and determine a course of action to institue a repair.

AUTO 93F Automotive Transmission Service

1 The student will perform a transmission service as required by factory maintenance schedule.

AUTO 94A Principles of Four Stroke Cycle Gas and Diesel Engines

1 After studying the theory of a 4-stroke cycle, internal combustion engine, the student will be able to explain in detail each of the four strokes, valve overlap, and blowdown. This will be done using a cut-away engine.

AUTO 94B Automotive Machining and Engine Service

1 Student will set up and grind a valve face with the proper surface finish, while maintaining a margin thickness of no less than 1/16\."

AUTO 94C Automotive Machining and Engine Service

1 Student will set up and hone a cylinder to a specified size, with the proper surface finish depending on the type of piston rings being used.

AUTO 94D Automotive Machining and Engine Service

1 Student will equalize the weight of the rotating ends and reciprocating ends of connecting rods within 1 gram of each other.

AUTO 94E Automotive Machining and Engine Service

1 Student will prepare a written estimate for a vehicle repair including all pertinant customer infromation on the repair order.

AUTO 94F Automotive Machining and Engine Service

1 Student will prepare a detailed checklist for an engine being assembed, including assembly of all subsystems.

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AUTO 99A Automotive Electricity, Battery and Cranking Systems

1 The student will demonstrate the ability to perform a battery load test, a starter draw test, a charging system test and analyze the readings.

AUTO 99B Automotive Charging, Ignition and Accessory Systems

1 The student will demonstrate the ability to repair a copper strand wire, perform a parasitic draw test, and measure the resistance of various components.

AUTO 99C Introduction to Engine Performance Systems

1 The student will be able to demonstrate the ability to properly install a distributor into an engine, install spark plug wires in the proper firing order and set ignition timing to specifications.

AUTO 99D Intermediate Engine Performance Systems

1 The student will be able to examine a vehicle with a no-start condition, and using analytical skills learned in class, be able to deduce the malfunctioning component(s) within 15 minutes.

AUTO 99E Basic Engine Performance Diagnostic Procedures

1 The student will be able to demonstrate how to properly retrieve DTC’s from a Powertrain Control Module (PCM), retrieve Freeze Frame Data from a PCM, and retrieve Inspection/Maintenance (I/M) Readiness Status from a PCM.

AUTO 99F Intermediate Engine Performance Diagnostic Procedures

1 The student will be able to perform a Smog Inspection (Acceleration Simulation Mode), a visual inspection and functional inspection per CA State guidelines.

BUS 10 Introduction to Business

1 Distinguish among the primary functions within a business, such as, marketing, operations, human resources, accounting and finance, and identify the interests and roles of key business stakeholders, such as employees, management, owners, and society.

BUS 10 Introduction to Business

2 Demonstrate a working vocabulary of business terms

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BUS 18	Business Law I	1	Demonstrate a knowledge of basic legal terminology and basic tort, constitutional, criminal, administrative and contract law.
BUS 18	Business Law I	2	Identify ethical issues in a business law context and evaluate factually simple contract issues using basic common law or UCC rules.
BUS 21	Business and Society	1	Describe and evaluate the industrial revolution with regard to its effects on human welfare, both positive and negative.
BUS 21	Business and Society	2	Describe how and why businesses are legally permitted to influence the political process in the United States. Describe the current limits on that power.
BUS 21	Business and Society	3	List and evaluate the ways in which society attempts to get businesses to behave in an ethical and socially-responsible fashion.
BUS 21	Business and Society	4	Defend the proposition that honesty is important in business.
BUS 54	Business Mathematics	1	Demonstrate an understanding of the \Time Value of Money\" concept in business."
BUS 54	Business Mathematics	2	Demonstrate a basic knowledge of the mathematics of pricing.
BUS 54	Business Mathematics	3	Calculate performance measures for investments such as stocks, bonds or mutual funds.
BUS 55	Introduction to Entrepreneurship	1	Examine the steps required, the support available, and the tactics commonly employed by entrepreneurs starting a business.
BUS 55	Introduction to Entrepreneurship	2	Critically evaluate business plans in terms of feasibility, investment potential, risk, and completeness.
BUS 56	Human Relations in the Workplace	1	Apply human relations theories to varied workplace situations and discuss the likely results.
BUS 56	Human Relations in the Workplace	2	Describe the impact of employees' human relations skills, ethical choices, attitudes, and physical and mental wellbeing on the success of an organization.

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BUS 56	Human Relations in the Workplace	3	Make ethical decisions by demonstrating personal and organizational social responsibility.
BUS 56	Human Relations in the Workplace	4	Describe the value of diversity in today's workplace.
BUS 57	Human Resource Management	1	Compare HR functions to formulate critical written and oral analysis of current global HR challenges.
BUS 57	Human Resource Management	2	Appraise the impact of HR as a strategic partner with corporate executive leadership to achieve competitive advantage in the marketplace.
BUS 57	Human Resource Management	3	Examine Human Resources (HR) practices and how they affect employee performance, motivation, and the firm.
BUS 58	The Business Plan	1	Develop and conduct a feasibility study analysis for a business plan.
BUS 58	The Business Plan	2	Write a business plan and deliver an effective presentation to potential investors.
BUS 59	Promoting Your Business with Social Media	1	Analyze relationship building with target customers and diverse partners and design a social media plan likely to produce favorable outcomes.
BUS 59	Promoting Your Business with Social Media	2	Examine a wide variety of cost-effective promotion tools.
BUS 60	International Business Management	1	Examine a country's economic, political, legal, social and cultural conditions and assess its business risks and opportunities.
BUS 60	International Business Management	2	Explain the roles of international trade, investment and the global monetary system.
BUS 60	International Business Management	3	Evaluate a global business scenario and determine the best courses of action.
BUS 65	Leadership	1	Compare, contrast and demonstrate leadership behaviors.
BUS 65	Leadership	2	Distinguish the roles, interaction and impact of the leader, the follower and the situation in the leadership model.
BUS 70	Principles of E-Business	1	Analyze and evaluate e-commerce business models including B2C, B2B, P2P, and others.

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BUS 70	Principles of E-Business	2	Compare and contrast e-commerce marketing strategies and tactics.
BUS 70	Principles of E-Business	3	Create a functional e-commerce website.
BUS 85	Business Communication	1	Describe and apply the principles of written and verbal business communications.
BUS 85	Business Communication	2	Develop and use a variety of communication strategies that are effective in different business situations.
BUS 85	Business Communication	3	Identify the most effective written and oral communication skills that fit personal communication style and situation.
BUS 87	Introduction to Selling	1	Communicate to others not just the details, but the benefits of an idea, product or service.
BUS 87	Introduction to Selling	2	Negotiate in a way that allows resolution of disagreements based on mutual interests, not win-lose positions.
BUS 87	Introduction to Selling	3	Explain how business to business sales transactions are constructed and executed.
BUS 89	Advertising	1	Relate contemporary advertising to the classic human communication model.
BUS 89	Advertising	2	Distinguish advertising from other elements of integrated marketing communications (IMC) and explain its role in an organization's marketing strategy.
BUS 89	Advertising	3	Identify the major social and economic aspects of advertising in the U.S. and contrast those with the role of advertising in other countries.
BUS 90	Principles of Marketing	1	Analyze the effectiveness of the marketing mix (product, price, promotion and distribution) for a particular organization.

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BUS 90	Principles of Marketing	2	Determine appropriate market segments and target markets and explain consumer behavior.
BUS 90	Principles of Marketing	3	Identify global forces external to the organization that affect marketing strategies.
BUS 91	Introduction to Personal Finance	1	Demonstrate a knowledge of opportunity costs and the time value of money.
BUS 91	Introduction to Personal Finance	2	Prepare, explain and analyze personal financial statements including the balance sheet and cash flow statement.
BUS 91	Introduction to Personal Finance	3	Analyze and evaluate various savings, investment, and insurance options.
BUS 96	Principles of Management	1	Examine the functions of planning, organizing, leading, staffing and controlling.
BUS 96	Principles of Management	2	Evaluate and anticipate the potential effectiveness of various management styles, communications and decisions for a given situation.
CIS 2	Computers and the Internet in Society	1	Analyze the effect of the Internet, computers, and cellular communications on individuals, culture, and society.
CIS 2	Computers and the Internet in Society	2	Analyze the effects of the Internet, computers, and cellular communications on institutions, including education, business, economics, and politics.
CIS 2	Computers and the Internet in Society	3	Judge the effect of the the Internet and computers on law and ethics.
CIS 3	Business Information Systems	1	Create and execute a plan to improve success factors in a business, using software and hardware.
CIS 3	Business Information Systems	2	Produce a business document utilizing word processing tools to show use of various formatting, such as columns, outlline, and numbering.
CIS 3	Business Information Systems	3	Design a model for business decision making utilizing spreadsheet software and incorporating charts, formulas, and formatting.

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CIS 3	Business Information Systems	4	Create a presentation on a technology topic utilizing presentation software incorporating graphics and text.
CIS 3	Business Information Systems	5	Solve a business data problem by utilizing database technology.
CIS 4	Computer Literacy	1	Manipulate data in a spreadsheet
CIS 4	Computer Literacy	2	Manage file and folder properties in the operating system.
CIS 4	Computer Literacy	3	Extract information from a database program.
CIS 14A	Visual Basic .NET Programming I	1	Design a graphical user interface in Visual Basic .NET implementing basic controls including text boxes, labels, list boxes, buttons, radio buttons, and checkboxes.
CIS 14A	Visual Basic .NET Programming I	2	Design the algorithm, write, document, debug and test the code for event procedures and sub procedures of a Visual Basic application incorporating elementary coding constructs.
CIS 14A	Visual Basic .NET Programming I	3	Read, analyze and explain introductory level Visual Basic code.
CIS 14B	Visual Basic .NET Programming II	1	Design, create and debug an application incorporating class modules, bas modules and multiple forms.
CIS 14B	Visual Basic .NET Programming II	2	Design, create and debug an application creating and updating a dataset from more than one table.
CIS 18A	Introduction to Unix/Linux	1	Use the Unix/Linux Operating System utilities and shell features for basic file manipulation, networking, and communication.
CIS 18B	Advanced Unix/Linux	1	Use the Unix/Linux Operating System utilities, shell features, and regular expressions for advanced text file manipulation.
CIS 18C	Shell Programming	1	Create programs in the Bourne Again, Bourne, Korn, and C shells, that interact with the Unix/Linux operating system.
CIS 21JA	Introduction to x86 Processor Assembly Language and Com	1	Investigate architectural components and design of microprocessors as well as evaluate and formulate computer and numeric data representation.

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CIS 21JA	Introduction to x86 Processor Assembly Language and Com	2	Design, code, document, analyze, debug, and test introductory level assembly programs for the x86 family of processors.
CIS 21JB	Advanced x86 Processor Assembly Programming	1	Design, code, document, analyze, debug, and test advanced level assembly programs for the x86 family of processor, including linkage to high level languages and floating point processing.
CIS 22A	Beginning Programming Methodologies in C++	1	Design solutions for introductory level problems using appropriate design methodology incorporating elementary programming constructs.
CIS 22A	Beginning Programming Methodologies in C++	2	Create algorithms, code, document, debug, and test introductory level C++ programs.
CIS 22A	Beginning Programming Methodologies in C++	3	Read, analyze and explain introductory level C++ programs.
CIS 22B	Intermediate Programming Methodologies in C++	1	Create algorithms, code, document, debug, and test intermediate level C++ programs.
CIS 22B	Intermediate Programming Methodologies in C++	2	Read, analyze and explain intermediate level C++ programs and their efficiency.
CIS 22B	Intermediate Programming Methodologies in C++	3	Design solutions for intermediate level problems using appropriate design methodology incorporating intermediate programming constructs including structures and objects.
CIS 22BH	Intermediate Programming Methodologies in C++ - HONOR	1	Read, analyze and explain intermediate level C++ programs and their efficiency.
CIS 22BH	Intermediate Programming Methodologies in C++ - HONOR	2	Design solutions for intermediate level problems using appropriate design methodology incorporating intermediate programming constructs including structures and objects.
CIS 22BH	Intermediate Programming Methodologies in C++ - HONOR	3	Create algorithms, code, document, debug, and test intermediate level C++ programs.
CIS 22C	Data Abstraction and Structures	1	Read, analyze and explain advanced data structures programs.

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CIS 22C	Data Abstraction and Structures	2	Design solutions for advanced problems using appropriate design methodology incorporating advanced data structures programming constructs.
CIS 22C	Data Abstraction and Structures	3	Create and analyze efficiency of advanced level data structures algorithms, code, document, debug, and test advanced data structures programs using multiple source and header files.
CIS 22CH	Data Abstraction and Structures - HONORS	1	Read, analyze and explain advanced data structures programs.
CIS 22CH	Data Abstraction and Structures - HONORS	2	Design solutions for advanced problems using appropriate design methodology incorporating advanced data structures programming constructs.
CIS 22CH	Data Abstraction and Structures - HONORS	3	Create and analyze efficiency of advanced level data structures algorithms, code, document, debug, and test advanced data structures programs using multiple source and header files.
CIS 26A	C as a Second Programming Language	1	Read, analyze and explain beginning and intermediate level C programs.
CIS 26A	C as a Second Programming Language	2	Design solutions for beginning and intermediate level problems using appropriate design methodology incorporating beginning and intermediate programming constructs.
CIS 26A	C as a Second Programming Language	3	Create algorithms, code, document, debug, and test beginning and intermediate level C programs.
CIS 26B	Advanced C Programming	1	Read, analyze and explain advanced C programs.
CIS 26B	Advanced C Programming	2	Design solutions for advanced problems using appropriate design methodology incorporating advanced programming constructs.
CIS 26B	Advanced C Programming	3	Create algorithms, code, document, debug, and test advanced level C programs using multiple source and header files.
CIS 27	Programming in C++ for C/Java Programmers	1	Create object oriented programs using the C++ language.

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CIS 28	Object Oriented Analysis and Design	1	Design and develop complex software solution from raw requirements using Object Oriented Analysis and Design techniques.
CIS 28	Object Oriented Analysis and Design	2	Synthesize major architectural patterns and frameworks and apply them to create software solutions.
CIS 29	Advanced C++ Programming	1	Create C++ programs using standard classes, advanced operators, multiple inheritance, and exception handling.
CIS 29	Advanced C++ Programming	2	Create and use libraries with the C++ language.
CIS 29	Advanced C++ Programming	3	Create and use templates, including the Standard Template Library, in C++ programs.
CIS 30A	Introduction to C# Programming	1	Read, analyze and explain intermediate level C# programs.
CIS 30A	Introduction to C# Programming	2	Design solutions for intermediate level problems using appropriate design methodology incorporating object-oriented intermediate programming constructs.
CIS 30A	Introduction to C# Programming	3	Create algorithms, code, document, debug, and test intermediate level C# programs.
CIS 30B	Advanced C# Programming	1	Read, analyze and explain advanced C# programs.
CIS 30B	Advanced C# Programming	2	Design solutions for advanced problems using appropriate design methodology incorporating elementary programming constructs.
CIS 30B	Advanced C# Programming	3	Create algorithms, code, document, debug, and test advanced C# programs.
CIS 31	Operating System Concepts	1	Analyze the functionality of a modern operating system in terms of different management functions.
CIS 31	Operating System Concepts	2	Describe the algorithms and basic data-structures being utilized in modern operating systems.
CIS 33A	Programming in Perl	1	Design, code, document, analyze, debug, and test introductory level Perl programs that include Perl modules and use operating system features.

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CIS 33B	Advanced Perl Programming	1	Design, code, document, analyze, debug, and test advanced level Perl programs that include object oriented Perl modules and access to database, TCP/IP, and system processes
CIS 35A	Java Programming	1	Read, analyze and explain intermediate level Java programs.
CIS 35A	Java Programming	2	Create algorithms, code, document, debug, and test intermediate level Java programs.
CIS 35B	Advanced Java Programming	1	Read, analyze and explain advanced Java programs.
CIS 35B	Advanced Java Programming	2	Design solutions for advanced problems using appropriate design methodology incorporating object oriented programming constructs and advanced Java concepts.
CIS 35B	Advanced Java Programming	3	Create algorithms, write, document, debug, and test advanced Java programs.
CIS 36A	Introduction to Computer Programming Using Java	1	Design solutions for introductory level problems using appropriate design methodology incorporating elementary programming constructs.
CIS 36A	Introduction to Computer Programming Using Java	2	Create algorithms, code, document, debug, and test introductory level Java programs.
CIS 36A	Introduction to Computer Programming Using Java	3	Read, analyze and explain introductory level Java programs.
CIS 36B	Intermediate Problem Solving in Java	1	Read, analyze and explain intermediate level Java programs.
CIS 36B	Intermediate Problem Solving in Java	2	Design solutions for intermediate level problems using appropriate design methodology incorporating intermediate programming constructs.
CIS 36B	Intermediate Problem Solving in Java	3	Create algorithms, code, document, debug, and test intermediate level Java programs.
CIS 40	Introduction to Programming in Python	1	Design, code, document, analyze, debug, and test introductory level Python programs

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CIS 41A	Python Programming	1	Design, code, document, analyze, debug, and test introductory level Python programs that include Python modules.
CIS 41B	Advanced Python Programming	1	Design, code, document, analyze, debug, and test advanced level Python programs that include Python modules for database, networking, graphics, and extensions
CIS 50	Introduction to Computers, Data Processing, and Applicatic	1	Describe the role that information systems play in business operations, management, and strategy.
CIS 50	Introduction to Computers, Data Processing, and Applicatic	2	Understand how common software, hardware, database, and networking applications can be applied to business problems.
CIS 53	Java for Mobile Development	1	Design mobile applications using object-oriented methodology and advanced Java concepts using Android Development Kit
CIS 53	Java for Mobile Development	2	Create algorithms, code, document, debug, and test mobile applications.
CIS 55	iOS Development	1	Design mobile applications using object-oriented methodology and advanced Swift concepts using iOS Development Kit.
CIS 55	iOS Development	2	Create algorithms, code, document, debug, and test mobile applications.
CIS 56	Network Security	1	Determine methods to protect network against security vulnerabilities.
CIS 57	Web Site Administration	1	Demonstrate how to install, configure and maintain a web server.
CIS 57	Web Site Administration	2	Create and apply user security policies to web server configuration.
CIS 63	Systems Design	1	Understand system types and the systems development life cycle.
CIS 63	Systems Design	2	Analyze system requirements and evaluate proposed solutions.

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CIS 64A	Database Management Systems	1	Prepare database design using database normalization theory and appropriate database schema representation techniques.
CIS 64A	Database Management Systems	2	Code, document, debug, and test introductory level SQL programs.
CIS 64B	Introduction to SQL	1	Design solutions for introductory level problems using appropriate design methodology incorporating interpreted database constructs.
CIS 64B	Introduction to SQL	2	Create algorithms, code, document, debug, and test introductory level SQL programs.
CIS 64C	Introduction to PL/SQL	1	Design solutions for introductory level problems using appropriate design methodology incorporating procedural database constructs.
CIS 64C	Introduction to PL/SQL	2	Create algorithms, code, document, debug, and test introductory level PL/SQL programs.
CIS 64D	Database Tuning	1	Apply performance tuning methods to tune large scale database systems.
CIS 64D	Database Tuning	2	Establish performance targets based on business requirements.
CIS 64E	Introduction to Large Scale Processing Systems	1	Design, implement and debug a distributed system using technology like Web Services.
CIS 64F	Introduction to Big Data and Analytics	1	Design, implement and debug a large scale database system using technology like Hadoop or Cassandra.
CIS 66	Introduction to Data Communication and Networking	1	Describe the various components, protocols, architectures, and applications of current communication and networking technologies, which are used in LANs, WANs, and the Internet.
CIS 66	Introduction to Data Communication and Networking	2	Define the basic properties of the TCP/IP, local area, wide area, and fiber optic networks.
CIS 67A	Local Area Networks	1	Define fundamental concepts of local area networks (LANs) architecture and protocols with emphasis on the first two layers, physical and data link layer, of the OSI model.
CIS 67A	Local Area Networks	2	Design a local-area network.

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CIS 67B	Introduction to Wide Area Networking	1	Define fundamental concepts of TCP/IP protocol suite with emphasis on the network layer, transport layer, and application layer of the suite.
CIS 67B	Introduction to Wide Area Networking	2	Design a small wide-area network.
CIS 73	Unix/Linux Systems Programming	1	Design, code, document, analyze, debug, and test client/server application programs for network communications.
CIS 74	Computer Software Quality Assurance	1	Write a formal Test Design Specification and associated Test Case Specification using IEEE templates.
CIS 74	Computer Software Quality Assurance	2	Create bug reports using a defect-tracking tool.
CIS 74	Computer Software Quality Assurance	3	Create, execute, and track test cases using a test case management (TCM) tool.
CIS 75A	Internet Concepts and TCP/IP Protocols	1	Define fundamental concepts of TCP/IP architecture and protocols, with emphasis on the network layer, transport layer, and application layer of the suite.
CIS 75A	Internet Concepts and TCP/IP Protocols	2	Describe the applications of TCP/IP to the Internet.
CIS 75B	Internet Programming with TCP/IP	1	Design and construct client and server applications using TCP/IP protocol suite and applying algorithms for enabling servers.
CIS 75B	Internet Programming with TCP/IP	2	Create algorithms, code, document, debug, and test client/server applications.
CIS 75D	Enterprise Security Policy Management	1	Create and refine enterprise security policy and procedures.
CIS 75D	Enterprise Security Policy Management	2	Create tools to track risks, document and mitigate them.
CIS 75E	Enterprise Emergency Response Planning	1	Create and refine emergency response plan for responding and recovering from disasters.
CIS 77	Special Projects in Computer Information Systems	1	Explain the fundamental concepts of the Computer Information Systems topic.
CIS 77	Special Projects in Computer Information Systems	2	Apply the fundamental concepts of the Computer Information Systems topic.
CIS 79	Managing Technology Projects	1	Determine and fulfill the expectations of the client and complete the steps of a technology project.

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CIS 79	Managing Technology Projects	2	Master the systematic approach to project design and management.
CIS 80A	Process Management	1	Create a process map for an organizational process.
CIS 80A	Process Management	2	Optimize a mapped process to eliminate redundancies which in return can improve process effency.
CIS 82W	Current Topics in Computer Information Systems	1	Explain the fundamental concepts of the Computer Information Systems topic.
CIS 82W	Current Topics in Computer Information Systems	2	Apply the fundamental concepts of the Computer Information Systems topic.
CIS 83	Open Computer Information Systems Laboratory	1	Students will be able to write code that requires the application of the concepts learned in CIS 82 - Current Topics in Computer Information Systems.
CIS 89A	Web Page Development	1	Create a web site using HTML and CSS and published to a web server.
CIS 89C	Client-Side Programming with JavaScript	1	Write functions and scripts using JavaScript.
CIS 89C	Client-Side Programming with JavaScript	2	Create web pages using Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), JavaScript, and the Document Object Model (DOM), and demonstrate how they interact together within a web document.
CIS 89D	Rich Internet Application Development	1	Create rich internet application using features in tools like HTML5.
CIS 89D	Rich Internet Application Development	2	Read, analyze and explain intermediate level Rich Internet Applications.
CIS 95A	Project Management - A Practicum	1	Manage projects using five bodies of knowledge including initation, planning, control, execution and closing.
CIS 95A	Project Management - A Practicum	2	Manage project risks by identifying them and mitigating them.
CIS 95B	Project Planning and Control - A Practicum	1	Create a detailed project plan complete with schedule, budget, risk mitigation plan, data and communication management plan for medium to large size projects.
CIS 95B	Project Planning and Control - A Practicum	2	Create a detailed plan to control budget, scope, quality, schedule and team risks.

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CIS 95C	Risk Assessment and Mitigation - A Practicum	1	Manage risks using tools and techniques learned in the course.
CIS 95C	Risk Assessment and Mitigation - A Practicum	2	Develop procedures and techniques to pro-actively reduce threats for project objectives.
CIS 95D	Managing Outsourcing - A Practicum	1	Create a RFP for a given set of requirements.
CIS 95D	Managing Outsourcing - A Practicum	2	Accept and analyze bids for an RFP.
CIS 95D	Managing Outsourcing - A Practicum	3	Manage the outsourced vendor inline to the contractual requirements.
CIS 95E	CAPM and PMP Exam Preparation	1	Complete a CAPM or PMP application.
CIS 95E	CAPM and PMP Exam Preparation	2	Prepare for CAPM and PMP exam by exploring Project Management Book of Knowledge (PMBOK).
CIS 95F	Managing Cloud Projects	1	Create cloud strategy within a business context being mindful of governance issues and business processes.
CIS 95G	Agile Project Management - A Practicum	1	Illustrate usage of Agile Software practices in product delivery, tracking and monitoring projects.
CIS 95G	Agile Project Management - A Practicum	2	Demonstrate creation of project plans with Agile Development methodology while understanding business value and planning feature iterations.
CIS 97	FLASH Animation	1	Students will be able to develop, with accuracy, use of Flash animation by using filters, tools, vectors, bitmaps, digital video and graphics within software to achieve clients goals of dynamic, interactive website.
CIS 97	FLASH Animation	2	Students will be able to develop and program inverse Kinematics, build and program interactivity, program and use video, program and control sound.
CIS 97	FLASH Animation	3	Students will be able to program optimal playback and publishing settings for major platforms.
CIS 98	Digital Image Editing Software (Photoshop)	1	Demonstrate correct use of Photoshop tools to alter existing graphics for Internet, print applications, scientific research imaging, and medical imaging.
CIS 98	Digital Image Editing Software (Photoshop)	2	Convert Photoshop files into HTML documents for practical use as interactive web pages.
CIS 99	Office Software Applications	1	Demonstrate correct format for creating letters using a word processing software.

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Course	Title		Description
CIS 99	Office Software Applications	2	Create spreadsheets to solve business problems.
CIS 99	Office Software Applications	3	Use of database software to create, search, modify and arrange information.
CIS 99	Office Software Applications	4	Create a text/graphics presentation using presentation graphics software.
CIS 102	Ethical Hacking	1	Demonstrate the ability to attack and defend a network.
CIS 104	Digital Forensics and Hacking Investigation	1	Demonstrate data recovery and cybercrime forensics investigation techniques.
CIS 108	Personal Computer Security Basics	1	Determine the best plan of action to stop malware based on security breach scenarios.
CIS 170F	Windows Administration	1	Install and upgrade Windows Operating System, and manage disks and file systems.
CIS 170F	Windows Administration	2	Configure Windows security features, networking and application support, and troubleshoot system.
DMT 52	Geometric Dimensioning and Tolerancing: CAD Application	1	The student will create an document package containing components modeled using CAD design tools in accordance with ASME standards and engineering drawings compliant with ASME Y14.5.
DMT 53	3D Printing, Reverse Engineering and Rapid Prototyping: St	1	Students who complete this course will be able to apply their knowledge of 3D Printing (AM) to analyze, compare, explain and utilize the various processes to prototyping and fabricate new mechanical designs and tools for industry.
DMT 55	Survey of Design and Manufacturing Processes/Modern Fal	1	Students will have a knowledge of manufacturing processes and the skills to develop and manipulate the operating parameters for a given design process.
DMT 60A	SolidWorks (Beginning)	1	Create an entry-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using SolidWorks.
DMT 61A	SolidWorks (Intermediate)	1	Trouble-shoot & modify “Course-Supplied” intermediate-level Parts and Assemblies, using SolidWorks.

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DMT 62A	SolidWorks: Top-Down Design and Advanced System Tools	1	Create and edit/maintain large & complex SolidWorks Assemblies using Advanced 3D Solid Modeling techniques & methods.
DMT 63A	SolidWorks: Surface Modeling	1	Create and edit/manipulate complex SolidWorks Surfacing design using Advanced 3D Surfacing Modeling techniques & methods.
DMT 65A	Creo Parametric (Beginning)	1	Create an entry-level Document Package which includes Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using Creo Parametric.
DMT 66A	Creo Parametric (Intermediate)	1	Create an intermediate-level Document Package which includes Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using Creo Parametric.
DMT 67A	Creo Parametric: Top-Down Design and Advanced System T	1	Functioning as a designer using Creo Parametric, the student will create an engineering document package which complies with industry-defined standards and shall include the following; components modeled using CAD design tools, assemblies generated from multiple components and engineering drawings for components and assemblies.
DMT 73A	Introduction to Computer Aided Design Using Autodesk Inv	1	Create an entry-level Design Document Package which includes (as assigned) Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using AutoDesk Inventor.
DMT 75A	Introduction to Computer Aided Design Using Siemens NX	1	Create an entry-level Design Document Package which includes (as assigned) Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using Siemsns NX.
DMT 77D	Special Projects In Manufacturing and CNC/NIMS Level 1	1	Complete advanced project or projects utilizing skills learned in entry level MCNC courses.
DMT 77E	Special Projects In Manufacturing and CNC/NIMS Level 2	1	Complete advanced project or projects utilizing skills learned in intermediate DMT courses.
DMT 77F	Special Projects In Manufacturing and CNC/NIMS Level 3	1	Complete advanced project or projects utilizing skills learned in advanced DMT courses.

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DMT 77X	Special Projects in CAD	1	The student will create an engineering document package which complies with industry-defined standards and shall include the following; components modeled using CAD design tools, assemblies generated from multiple components and engineering drawings.
DMT 80	Introduction to Machining and CNC Processes	1	Analyze, construct, and inspect assigned machined projects using the introductory principles of machining.
DMT 80	Introduction to Machining and CNC Processes	2	Operate machines and equipment safely.
DMT 82	Machining Practices Using Conventional Machine Tools, To	1	Analyze, construct, and inspect assigned machined projects using advanced principles of machining.
DMT 82	Machining Practices Using Conventional Machine Tools, To	2	Demonstrate safe operation of specialized machining equipment to construct advanced assemblies.
DMT 84A	Introduction to Computer-Aided Numerical Control (CNC) F	1	Demonstrate the set up and basic operation of vertical machining centers.
DMT 84A	Introduction to Computer-Aided Numerical Control (CNC) F	2	Create basic word-address programs to successfully construct projects using vertical machining centers.
DMT 84B	Computer-Aided Numerical Control (CNC) Programming an	1	Demonstrate the set up and advanced operation of vertical machining centers.
DMT 84B	Computer-Aided Numerical Control (CNC) Programming an	2	Create advanced word-address programs to successfully construct projects using vertical machining centers.
DMT 84C	CNC Lathes-Horizontal Mill-4th Axis Rotary-Programming C	1	Demonstrate the set up and operation of lathes, horizontal machining centers, and rotary axis.
DMT 84C	CNC Lathes-Horizontal Mill-4th Axis Rotary-Programming C	2	Create word-address programs to successfully construct projects using lathes, horizontal machining centers, and rotary axis.
DMT 89A	CAM Based CNC Multi-Axis Programming Using NX	1	Produce tool paths from advanced surface geometry to create word address programs.
DMT 89A	CAM Based CNC Multi-Axis Programming Using NX	2	Produce tool paths from advanced part geometry to create word address programs for multi-axis machining centers.
DMT 90	Print Reading and Machine Shop Calculations	1	Demonstrate the ability to interpret multi-view drawings and prints.
DMT 90	Print Reading and Machine Shop Calculations	2	Demonstrate the ability to solve common calculations found in machine shop applications.

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DMT 91	Dimensional Metrology	1	Demonstrate the ability to utilize common guages, measurement instruments, and calibration tools.
DMT 91	Dimensional Metrology	2	Demonstrate the applications of precision measurement instruments.
DMT 92	Applied Geometric Inspection Dimensioning and Tolerancir	1	Apply geometric dimensioning and tolerancing standards to interpret drawings and inspect manufactured parts.
DMT 92	Applied Geometric Inspection Dimensioning and Tolerancir	2	Demonstrate basic operation of the coordinate measuring machine to inspect manufactured parts.
DMT 93	Introduction to Quality Assurance	1	Demonstrate an understanding of quality assurance objectives, methods, and processes.
DMT 93	Introduction to Quality Assurance	2	Demonstrate a working knowledge of calibration systems, inspection methodology, statistical process control indices, and quality sampling techniques.
DMT 93	Introduction to Quality Assurance	3	Explain quality improvement concepts and a working knowledge of continuous improvement programs.
DMT 95	Manufacturing Materials and Processes	1	Conduct material property analysis to determine appropriate material selection and use.
DMT 95	Manufacturing Materials and Processes	2	Analyze, compare, and explain manufacturing processes such as molding, forming, forging and casting.
DMT 101	CAD Technology Laboratory Creo Parametric (Beginning)	1	Create an entry-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using Creo.
DMT 102	CAD Technology Laboratory SolidWorks (Beginning)	1	Create an entry-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Basic Drawings for Parts and Assemblies, using SolidWorks.
DMT 103	CAD Technology Laboratory Creo Parametric (Intermediate	1	Create an intermediate-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Drawings for Parts and Assemblies, using Creo.
DMT 104	CAD Technology Laboratory SolidWorks (Intermediate)	1	Create an intermediate Document Package which includes (as assigned) Solid Parts, Assemblies, and Drawings for Parts and Assemblies, using SolidWorks.

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DMT 105   CAD Technology Laboratory Creo Parametric (Advanced)   1 Create an advanced-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Drawings for Parts and Assemblies, using SolidWorks.

DMT 106   CAD Technology Laboratory SolidWorks (Advanced)   1 Create an advanced-level Document Package which includes (as assigned) Solid Parts, Assemblies, and Drawings for Parts and Assemblies, using SolidWorks.

DMT 107   CAD Technology Laboratory Creo Parametric (Surfaces)   1 Student Learning Outcome: Functioning as a designer, the student will create an engineering document package which complies with industry-defined standards and shall include the following: components modeled using CAD design tools; assemblies generated from multiple components; engineering drawings for components and assemblies.

DMT 108   CAD Technology Laboratory SolidWorks (Surfaces)   1 Student Learning Outcome: Functioning as a designer, the student will create an engineering document package which complies with industry-defined standards and shall include the following: components modeled using CAD design tools; assemblies generated from multiple components; engineering drawings for components and assemblies.

DMT 109   CAD Technology Laboratory Creo Parametric (Sheetmetal)   1 Functioning as a designer, the student will create an engineering document package which complies with industry-defined standards and shall include the following: components modeled using CAD design tools; assemblies generated from multiple components; engineering drawings for components and assemblies.

DMT 110   CAD Technology Laboratory Geometric Dimensioning and 1   1 Functioning as a designer, the student will create an engineering document package which complies with industry-defined standards and shall include the following: components modeled using CAD design tools; assemblies generated from multiple components; engineering drawings for components and assemblies.

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DMT 201   Manufacturing and CNC Technology Laboratory/Conventio   1 Complete assignments and practice skills from co-requisite DMT class.

DMT 203   Manufacturing and CNC Technology Laboratory/CNC Mach   1 Complete assignments and practice skills from co-requisite DMT class.

DMT 204   Manufacturing and CNC Technology Laboratory/CNC Mach   1 Complete assignments and practice skills from co-requisite DMT class.

DMT 205   Manufacturing and CNC Technology Laboratory/CAD CAM   1 Complete assignments and practice skills from co-requisite DMT class.

REST 50   Real Estate Principles   1 Demonstrate a knowledge of how real property is described, acquired, appraised, financed, encumbered and leased; how title to real property is held in California, evaluate factually simple real estate contract issues from a buyer's, seller's and real estate agent's perspective and identify and evaluate ethical issues in a California real estate context.

REST 51   Real Estate Practices   1 Explain and interpret real estate licensing laws in California and how they apply to the major areas of specialization in the real estate field and explain, interpret and evaluate the various types of California listing agreements and real estate sales agreements used in California and evaluate factually simple California real estate profession issues and explain how the Commissioner's Code of Ethics is applied to those issues.

REST 52A   Legal Aspects of Real Estate   1 Demonstrate a knowledge of the basic workings of the legal system in California and the United States as it applies to California real estate and demonstrate a knowledge of the various types of listing agreements, how title is held to real property, various tenancies in the rental of real property and the primary legal issues in appraising and financing real property in California and explain and evaluate the real estate licensing process and the administrative agencies that regulate the California real estate industry.

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REST 53   Real Estate Finance

1 Demonstrate a knowledge of how real estate is financed in California from a lending, regulatory and borrowers perspective and the real estate lending process from underwriting and qualifying through funding and loan retirement and demonstrate an understanding of the key players in California real estate finance.

REST 61   Real Estate Investments

1 Identify, analyze and evaluate real estate investments to include residential, commercial, industrial properties and land development while considering taxation and financing issues in the acquisition, ownership and sale of real estate investments and construct cash flow models utilizing discounted cash flows for analysis of economic viability of investment property.