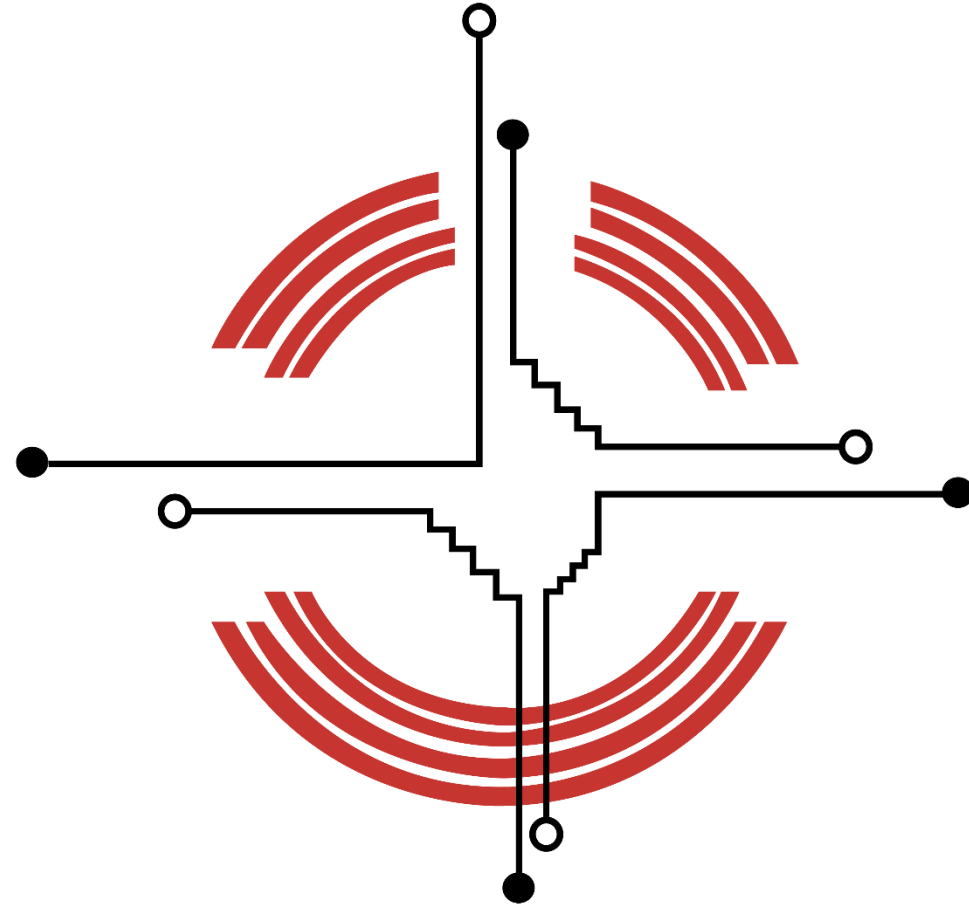


NAVAJO TECHNICAL UNIVERSITY



2019-2020 CATALOG

ADDENDUM

2019-2020 Academic Calendar

Fall Semester 2019

Pre-Registration Begins	Apr 22
Faculty First Day	Aug 12
New Student Orientation	Aug 15
On-Site Registration	Aug 16
Instruction Begins	Aug 19
Late Registration w/fee	Aug 20-21
Last Day to Add/Drop Classes w/out W.....	Aug 23
HOLIDAY - Labor Day	Sep 2
Fall Graduation Petition due.....	Sep 27
Mid Term Exams.....	Oct 7-11
Fall Break.....	Oct 17-18
Last Day to Withdraw With a W	Oct 28
HOLIDAY - Veterans Day observed	Nov 11
HOLIDAY - Thanksgiving Day	Nov 28
HOLIDAY - Navajo Family Day.....	Nov 29
Final Exams	Dec 9-7
Grades due to Registrar	Dec 12
FALL GRADUATION	Dec 13
HOLIDAY - Christmas	Dec 25

Spring Semester 2020

On-Site Pre-Registration	Oct 28
HOLIDAY - New Year's Day.....	Jan 01
Faculty Return	Jan 13
New Student Orientation.....	Jan 16
On-Site Registration	Jan 17
HOLIDAY - Martin Luther King Day	Jan 20
Instruction Begins.....	Jan 21
Late Registration w/ fee	Jan 22-23
Last Day Add/ Drop Classes w/out W	Jan 24
HOLIDAY - President's Day.....	Feb 17
Spring Graduation Petitions due	Feb 28
Mid Term Exams	Mar 9-13
Spring Break.....	Mar 16-20
Last Day to Withdraw With a W	Apr 2
Final Exams.....	May 11-13
Final Grades due	May 14
SPRING GRADUATION.....	May 15

2020 Summer Session

Pre-Registration Begins	Mar 30	Midterm Exam	Jun 26
Instruction Begins.....	Jun 8	Last Day to Withdraw	Jul 3
Late Registration w/ fee	Jun 9	HOLIDAY - Independence Day	Jul 4
Last Day Add/ Drop Classes w/out W	Jun 10	Last Day of Class/Grades Due.....	Jul 17

See instructional site for orientation schedule

Effective: July 9, 2019

BACHELOR OF ARTS

Business Administration

A degree in Business should open the door to many career options. The desire of the Department of Business is to provide an education in business of the highest possible quality. In the first two years of studying Business at NTU, students are required to take common set of courses to prepare them for more specialized courses in the third and fourth years. Many of these initial courses are shared with other departments at the university, allowing students to appreciate the interdisciplinary nature of business. Students would be encouraged to develop a broad knowledge of business. Knowledge in these specialized subjects is intended to lay the groundwork for entry into a range of much needed professions in the Native American Communities such as the Navajo Nation, entrepreneurship, hospitals, Navajo Housing Authority, Navajo Tribal Utility Association, etc.

A student needs to complete the core Business and general education courses within the first two years of study with a grade point average of 2.50 or better before taking the upper level core courses (300 and 400-level courses).

Business Administration Requirements: 120 Credits

BUSINESS ADMINISTRATION PROGRAM		
Semester FIRST		CREDITS
ENG 110	Freshman Composition	3
BIO 110	Elements of Biology	4
ACG 101	Accounting Principles I	3
CMP 101	Introduction to Computers/ Elective	3
PSY 105	Introduction to Psychology	3
Semester TWO		
CHM 110	Elements of Chemistry	4
MTH 121	College Algebra	4
NAV 110	Foundation of Navajo Culture	3
COM 150	Interpersonal Communication	3
ACG 111	Accounting Principles II	3
Semester THREE		
ECN 201	Principles of Microeconomics	3
ENG 111	Composition and Research	3
HST 210	American History	3
MTH 213	Elementary Statistics	3
LAW 203	Business Law	3
Semester FOUR		
ACG 210	Principles of Management	3
ACG 212	Introduction to Finance	3
ACG 225	Managerial Accounting	3
ECN 202	Principles of Macroeconomics	3
LAW 205	Professional Responsibility and Ethics	3
Semester FIVE		
ACG 216	Principles of Marketing	3
BUS 302	Human Resources Management	3
BUS 305	Effective Business Communication	3
BUS 310	Business Statistics	3
BUS 328	International Management	3
Semester SIX		
BUS 331	Social Environment of Business	3
BUS 335	Tourism and Hospitality Management	3
BUS 350	Organizational Theory and Behavior	3
BUS 340	Management Information System	3
BUS 352	Project Management	3
Semester SEVEN		
BUS 353	Supply Chain and Operation Management	3
BUS 364	Business of Gaming	3
BUS 375	Financial Management	3
BUS 440	Business Analytics	3
BUS 496	Senior Seminar and Strategic Management	3
Summer Semester		
BUS 437	Internship in Business	3
Semester EIGHT		
BUS 485	Global Business Strategies	3
BUS 480	Business Plan Development	3
BUS 380	Management for Environmental Sustainability and Durable Competitive Advantage	3
BUS 455	Entrepreneurial Practicum	3
TOTAL CREDIT HOURS REQUIRED		120

CERTIFICATE PROGRAM

Plumbing

A certificate course in plumbing prepares students to install and repair water distribution system, drainage, gas, bathtubs, toilets, dishwashers, and water heaters, septic tanks in homes, business, and factories. Graduates from the plumbing program can work as pipefitters, i.e., install and maintain pipes, which carry chemicals and gases in manufacturing, commercial, and industrial settings. Also, pipefitters install pipe systems in power plants and heating and cooling in large offices. The graduates from the program can work as steamfitters, who specialize in liquids and gases that are under high pressure as well as installation and repair of gages and automatic controls.

Upon completion of the program, graduates will be able to go into apprenticeship program and obtain a journeyman certification in plumbing or they can continue with an associate degree program in plumbing. Training of plumbers, pipefitters and steamfitters requires a combination of classroom instruction and on-the-job training. Plumbers, pipefitters, and steamfitters usually perform the following similar duties:

- installation and maintenance of piping systems and fixtures
- work on residential, commercial, and industrial projects;
- follow safety regulations to do the job correctly and safely;
- prepare cost estimates for clients;
- read blueprints and follow state and local building codes;
- inspect and test installed pipe systems and pipelines;
- troubleshoot malfunctioning systems; and
- repair and replace worn parts.

Certificate-Plumbing Requirements: 32 Credits

PLUMBING REQUIRED COURSE		
Semester ONE		Credits
ENG 105	Applied Technical Writing	3
MTH 113	Technical Mathematics II	3
CMP101	Introduction to Computers	3
CT 121	Introduction to Building Environmental System	2
PLMB 101	Introduction to Plumbing Concepts and Applications	2
Semester TWO		Credits
NAVXXX	Navajo Studies Course	3
CT 210	Construction Site Safety Management	1
PLMB 103	Water Supply and Distribution Piping	3
PLMB 105	Plumbing Fixtures and Blueprint Reading	2
Semester THREE		
PLMB 104	Drainage, Waste, and Venting	3
CT 102	Construction Math and Drawing	2
PLMB 113	Plumbing and Pipefitting Fundamentals	2
PLMB 114	Gas Piping Installations	3
TOTAL REQUIRED CREDIT HOURS		32

Course Descriptions:

Accounting

ACG-225 (3) Managerial Accounting

This course is designed to introduce students to managerial accounting and the role of managerial accounting in a business. Students will learn the concepts of direct and indirect costs; direct materials, direct labor, and factory overheads; and product and period costs. They will learn to describe and illustrate statements for a manufacturing business such as the balance sheet, statement of cost of goods manufactured and the income statement. They will also learn managerial accounting budgeting, the different methods of cost allocations, process costing systems, activity-based costing and cost behavior. Students will know the cost-volume-profit analysis, variable costing for management analysis and performance evaluations using variances from standard costs and for decentralized operations; differential analysis and product pricing, capital investment analysis, know the differences of lean principles, lean accounting and activity analysis. Students will have a strong comprehension of the uses of managerial accounting information and describe the specific needs of a company's management. *Prerequisite: "C" or better in ACG-101 and ACG-212.*

Business

BUS-302 (3) Human Resource Management

This course is the study of human resource management function in organization, and encompasses recruitment, selection, and maintenance of a qualified, motivated, and productive workforce. The effective performance of these functions requires understanding and skill in employment law, planning, job analysis, recruitment, selection, orientation, training, employee development, performance appraisal, compensation, benefits, safety, and labor relations. Emphasis is placed on how human resource management as a whole enhances organizational performance and success. Even if you do not enter into a career in Human Resources, this course will be useful no

matter what career path you pursue since it addresses issues that will have an impact on you in the workplace. *Prerequisite: "C" or better in ACG-210, LAW-205.*

BUS-305 (3) Effective Business Communication

This course presents communication as integral to management strategy and as a critical component for success in the workplace. In this class, you will develop a foundation for designing effective messages, both written and oral, from concept to delivery. You will use a strategic communication model to identify objectives, analyze audiences, choose information, and create the most effective arrangement and channel for that message. Particularly, the course emphasizes elements of persuasive communication: how to design messages for diverse and possibly resistant audiences and how to present that information in a credible and convincing way. Specifically, you will practice drafting and editing clear, precise, and readable written business documents as well as learn to design documents to make information easily accessible to a busy, executive-level reader. *Prerequisite: "C" or better in ENG-111.*

BUS-310 (3) Business Statistics

This course is an introduction to the principles and practice of business statistics emphasizing the role of data in decision-making. Among the topics that the course will cover are data collection techniques and their limitations, visual and numerical summaries of data, sampling distributions, confidence interval estimation, hypothesis testing, goodness of fit tests, and linear regression techniques. *Prerequisite: "C" or better in MTH-213.*

BUS-328 (3) International Management

This course introduces to the principles and practices of managing international businesses for it is an interdisciplinary course depicting a broad view of the increasing level, scope, and

complexity managers facing in this new millennium of international businesses while captivating the general management perspective throughout the semester. It also lays the foundation for the study of International management. Business is becoming increasingly global. The barriers to trade continue to fall, and the level of trade among countries continues to rise. The result is that a firm's competitors may no longer be in the next state or province but in a country that it hardly knew existed a few years ago and people need to be abreast with it.

Prerequisite: "C" or better in ACG-210.

BUS-331 (3) Social Environment of Business

In a world economy that is becoming increasingly integrated and interdependent, the relationship between business and society is becoming ever more complex. The globalization of business, the emergence of civil society organizations in many nations, and new government regulations and international agreements have significantly altered the job of managers and the nature of strategic decision making within the firm. At no time has business faced greater public scrutiny or more urgent demands to act in an ethical and socially responsible manner than at the present.

Prerequisite: "C" or better in BUS-305.

BUS-335 (3) Tourism and Hospitality Management

The Tourism & Hospitality course will introduce students to the world's largest industries, from destination planning, hotel and restaurant management to sports, entertainment and event management, and include the study of geography, economics, and world cultures. Tourism & Travel are thriving industries with a multitude of employment opportunities. This program will provide students with curriculum focused on current tourism, travel and hospitality related industries. Students learn about the history of the industry, explore traveler motivation and consumer needs, the industry's economic and environmental impacts, domestic and international travel, and sales in tourism.

Prerequisite: "C" or better in ACG-210.

BUS-340 (3) Management Information System

The purpose of this course is to provide an introduction to the field of management of information systems (MIS). Managing information systems has become a task for all levels of managers and all function areas of the business. This course is designed to familiarize students with the concepts related to the utilization of information technology in business organizations. It will focus both on technical and managerial aspects of information technology adoption in the organization. Topics such as information technology infrastructure, electronic commerce, information systems and business strategy, ethical issues related to information systems will be covered in class. The course should provide the student with knowledge of the core principles of MIS, focusing on breadth rather than depth of knowledge. Learning activities will include case studies, group assignments, and application software exercises that will provide an opportunity to apply MIS concepts to real-world applications.

Prerequisite: "C" or better in CMP-101 and ACG-210.

BUS-350 (3) Organizational Theory and Behavior

Organization Theory and Behavior examines the theoretical frameworks developed to aid us in understanding how public sector organizations are structured and operate. The study of organization theory also examines how people interact and work together within an organizational setting. The purpose of this course is for students to explore and understand the classical and contemporary organizational theory and behavior literature. Organizations are the medium through which work in the public sector occurs. Thus, in order for students to become effective public administrator, they must gain a fundamental understanding of the nature of organizations and the various factors that influence human behavior within them. During the course of this semester we will examine classical and contemporary readings on organizational theory to introduce you to the various perspectives on the structure and behavior of the organizations that we inhabit

daily. *Prerequisite: "C" or better in PSY-105 and BUS-305.*

BUS-352 (3) Project Management

This course covers key components of project management including project integration, project scope management, project time and cost management, quality management, human resource considerations, communications, risk management, and procurement management. Project Management introduces project management from the standpoint of a manager who must organize, plan, implement, and control tasks to achieve an organization's schedule, budget, and performance objectives. *Prerequisite: "C" or better in BUS-305.*

BUS-353 (3) Supply Chain and Operation Management

This course focuses on management and improvement of supply chain processes and performance. It will be valuable for students who would like to pursue a career in consulting or take a position in operations, marketing or finance functions in a manufacturing or distribution firm. We explore important supply chain metrics, primary tradeoffs in making supply chain decisions, and basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfillment and supply chain coordination. We will also investigate topics such as global supply chain design, logistics, and outsourcing, several other recent supply chain innovations. *Prerequisite: "C" or better in BUS-302.*

BUS-364 (3) Business of Gaming

This course will investigate the history of gaming in the United States and will investigate why the gaming industry is one of the fastest-growing industries from its beginning and up through modern day operations. Students will also gain an understanding the importance of gaming and how it highlights tourist attractions. Students will also gain an understanding of how Native American tribes use revenues for economic development. Students will also gain an understanding of the state and federal laws that govern gaming and casino management.

This course will also cover on the topic sociology of gambling and its addiction. *Prerequisite: "C" or better in ACG-210.*

BUS 375 (3) Financial Management

Financial Management studies corporate finance and capital markets, emphasizing the financial aspects of managerial decisions. It touches on all areas of finance, including the valuation of real and financial assets, risk management and financial derivatives, the trade-off between risk and expected return, and corporate financing and dividend policy. The course draws heavily on empirical research to help guide managerial decisions. *Prerequisite: "C" or better in ACG-212.*

BUS-380 (3 Credits) Management for Environmental Sustainability and Durable Competitive Advantage

Businesses are increasingly applying strategic management tools to incorporate considerations of sustainability into decision-making and operations. While some businesses incorporate sustainable practices because of an ethical conviction to do well for society and the environment, most are motivated to address pressures from stakeholders such as regulators, shareholders, customers and neighbors and to exploit knowledge and experience for long term competitive advantage. This course will examine how businesses develop and implement strategies to promote sustainability. Students will examine roles and responsibilities of sustainable strategic managers and learn how to apply the tools of strategic business management to problems of sustainability. Students will consider how managers apply leadership practices to promote sustainable practices in their organizations. Business case study analysis will be a critical component of this course, as will team work. *Prerequisite: "C" or better in BUS-352.*

BUS-437 (3) Internship in Business

An internship experience provides the student with an opportunity to explore career interests while applying knowledge and skills learned in the classroom in a work setting. The experience also helps students gain a clearer sense of what

they still need to learn and provides an opportunity to build professional networks.
Prerequisite: "C" or better in BUS-352.

BUS-440 (3) Business Analytics

The course is an introduction to Business Analytics. It covers managerial statistical tools in descriptive analytics and predictive analytics, including regression. Other topics covered include forecasting, risk analysis, simulation, and data mining, and decision analysis. This course provides students with the fundamental concepts and tools needed to understand the emerging role of business analytics in organizations and shows students how to apply basic business analytics tools in a spreadsheet environment, and how to communicate with analytics professionals to effectively use and interpret analytic models and results for making better business decision. Emphasis is placed on applications, concepts and interpretation of results, rather than theory and calculations.
Prerequisite: "C" or better in BUS-310, BUS-340.

BUS-455 (3) Entrepreneurial Practicum

The objective of an Entrepreneurial Practicum is to provide students with a practical client working experience, which is essential for a more complete understanding of the application of technical degree coursework and business theories and procedures. In the course, students learn about the entrepreneurial mindset and explore the steps to entrepreneurship. In the Practicum student work takes on the characteristics of a real business with guided, then independent application of skills and knowledge in an entrepreneurial setting. Students network with professionals who are entrepreneurs or who assist entrepreneurs in finding opportunities for commercialization.
Prerequisite: "C" or better in BUS-352.

BUS-480 (3) Business Plan Development

This course will prepare the student for running a business. The emphasis of the course will be in the development of a functional business plan while gaining a thorough knowledge of the legal requirements for establishing a business along with an understanding of the financial

obligations of owning a business. This course provides participants wide range of business/management skills, but especially know-how to launch a new venture company or start one inside an established organization.
Prerequisite: "C" or better in BUS-440.

BUS-485 (3) Global Business Strategies

In this course students learn to assess corporate strategy and to develop corporate strategy for transnational's, multinationals and other global corporate entities. Through lecture, reading, case study, and activities, students analyze corporate functions such as marketing, operations, human resource management and finance to learn to successfully manage these functions in a foreign setting. Geopolitical, macroeconomic, and market trends are probed for their effect on firm strategy. Thus students learn to effectively analyze that strategy and to forecast the immediate effect and global impact of large-scale forces. *Prerequisite: "C" or better in BUS-331.*

BUS-496 (3) Senior Seminar and Strategic Management

The project completed during the semester will allow the student to demonstrate mastery of the competencies expected of graduates of the Business Administration program. Emphasis is on critical thinking, effective communication, ethical decision-making, understanding of operating in a Navajo Nation context, and application of appropriate research methods. The student will assume the role of management consultant for the purpose of this project. In this role the student will identify problems and formulate reasonable solutions for a client they have identified as the focus of their project. An alternative project will be designed with the student in the role of a potential entrepreneur who proposes to set up a new business based upon the student's ideas. The student will identify the product or service, the target market, potential challenges, and possible solutions to those challenges.
Prerequisite: "C" or better in BUS-352.

Economics

ECN-201 (3 Credits) Principles of Microeconomics

This is an introductory course that teaches the fundamentals of microeconomics. This course begins with an introduction to supply and demand and the basic forces that determine equilibrium in a market economy. Next, it introduces a framework for learning about consumer behavior and analyzing consumer decisions. We then turn our attention to firms and their decisions about optimal production, and the impact of different market structures on firms' behavior. The final section of the course provides an introduction to some of the more advanced topics that can be analyzed using microeconomic theory. These include international trade, the impact of uncertainty on consumer behavior, the operation of capital markets, equity vs. efficiency trade-offs in economic policy and social insurance. By the end of the course, you will be able to understand introductory microeconomic theory, solve basic microeconomic problems, and use these techniques to think about a number of policy questions relevant to the operation of the real economy. *Prerequisite: "C" or better in ECN-111.*

ECN-202 (3 Credits) Principles of Macroeconomics

This course will teach students the basic tools of macroeconomics and apply them to real world economic policy. The goals of the course are for students to (a) understand how to evaluate macroeconomic conditions such as unemployment, inflation, and growth (b) understand how monetary policy and fiscal policy can be used to influence short-run macroeconomic conditions (c) understand media accounts of macroeconomic events. The course will cover a broad range of topics in macroeconomic policy. Examples of issues to be discussed include the role of fiscal and monetary policies in stabilizing the economy, the relationship between inflation and unemployment, the role of government policy in promoting long-term economic growth, monetary and fiscal policies in an open economy, European Monetary Union, deficits,

and stabilization and reform. *Prerequisite: "C" or better in ECN-111.*

Plumbing

PLMB 104 (3) Drainage, Waste, and Venting

Students will be able to demonstrate a strong understanding of drain, waste, and vent systems effectively. Discuss and identify requirements for proper installation of drain, waste, and vent systems. Identify fixture unit loads for wastewater, and drain, waste, and vent system sizing. Students will be able to understand installation of various components in the systems in accordance with plumbing code.

Prerequisite: A grade of C or better in PLMB 101.

PLMB 103 (3) Water Supply and Distribution Piping

Students will be able to understand water supply and distribution more effectively. Discuss and identify requirements for proper installation of water supply and distributions systems as well as plumbing fixtures and fittings in accordance with the uniform plumbing codes.

Prerequisite: A grade of C or better in PLMB 101.

PLMB 105 (2) Plumbing Fixtures and Blueprint Reading

Fixtures, appliances, pump systems design, plumbing codes and standards, acceptable installation practices and acceptable materials, troubleshooting and repair of pipes will be discussed. In addition, students will demonstrate a strong understanding of basic drawing tools, measuring tools, lettering, drawings, and symbols found on blueprint, which are associated with plumbing and pipe industry.

Prerequisite: A grade of C or better in PLMB 101.

PLMB 113 (2) Plumbing and Pipefitting Fundamentals

Students will be able to identify common pipes and fittings used for plumbing installations. Pipe joining, valves, venting, backflow prevention and water quality will be discussed.

Additionally, terminology of design, construction and sizing, and approved uses of different materials will be taught in this course.

Prerequisite: A grade of C or better in PLMB 101

PLMP 114 (3) Gas Piping Installations

Student will be able to gain hands-on experience in safe handling of natural gas, liquefied petroleum gas, fuel oil, potential hazards, systems installations, and testing.

Prerequisite: A grade of C or better in PLMB 105.

ZUNI

Zuni 101 (3) Introduction to Zuni

Introduction to Zuni Language 101 for Non-Zuni speakers is to develop non-Zuni speaker's oral skills that are relevant to establish and maintain direct conversation and communication with Zuni speakers.