

# Accounting

## Courses

### **ACCTNG 2400 Fundamentals of Financial Accounting: 3 semester hours**

Prerequisites: MATH 1030 and completion of 27 credit hours. MATH 1030 may be taken concurrently. This is a one semester course in financial accounting theory and practice. The primary emphasis is on the corporate financial statements of income, financial position and cash flow-their content and interpretation; and the impact of financial transactions upon them.

### **ACCTNG 2410 Managerial Accounting: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 2400. This is an advanced course that goes beyond the scope of a second-semester course in fundamentals of accounting. The development, interpretation, and use of relevant cost behavior, control, and traceability concepts for management planning, controlling and decision making are emphasized. Topics include: an introduction to product costing, the contribution concept, direct costing, performance standards and variance analysis, responsibility accounting, segment profitability, alternative choice decisions, and capital budgeting.

### **ACCTNG 2430 Accounting Ethics: 3 semester hours**

Same as PHIL 2249. Prerequisites: ACCTNG 2400 and ACCTNG 2410 (may be taken concurrently). This course examines moral problems as they relate to the profession of accounting and the professional Codes of Conduct that govern the accounting profession. Students will apply the requirements of the Codes of Conduct to cases where ethical dilemmas or violations of professional standards may be present.

### **ACCTNG 3401 Financial Accounting and Reporting I: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 2410, minimum 2.0 campus GPA, 57 credit hours. This course reviews the foundations of financial accounting theory and the financial statement preparation process as well as accounting theory and practice related to current assets and current liabilities (except for investments in securities). The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

### **ACCTNG 3402 Financial Accounting and Reporting II: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 3401, minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL, minimum campus GPA of 2.0. Accounting theory and practice related to topics such as investments in securities, operational assets, current and long-term liabilities, stockholders' equity and statement of cash flows. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

### **ACCTNG 3411 Cost Accounting: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 3401 and a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. The study of the basic principles of cost determination for, and control of, manufacturing and distribution activities. Topics include job-order costing, process costing, cost allocations, and the development and use of standard costs within a system of absorption costing.

### **ACCTNG 3421 Accounting Information Systems: 3 semester hours**

Prerequisites: MATH 1030, INFSYS 2800, ACCTNG 2410, and a minimum campus GPA of 2.0. Examines the fundamentals of accounting information systems, including hardware and software considerations, internal controls, and transaction processing cycles. Also focuses upon the development of efficient spreadsheets as applied to financial and managerial accounting concepts.

### **ACCTNG 3441 Income Taxes: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 3401 and a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Fundamentals of Federal income taxation. Topics include taxable entities, income, deductions, tax accounting methods, tax basis, and property transactions at both the conceptual and operational levels.

### **ACCTNG 3451 Accounting for Governmental and Not-For-Profit Entities: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 3402, a minimum 2.3 GPA in all accounting courses at the 3000-level and above taken at UMSL and a minimum 2.0 campus GPA. Principles of fund accounting and financial reporting for governmental and nonprofit entities. This course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

### **ACCTNG 3490 Internship in Accounting: 1-3 semester hours**

Prerequisites: ACCTNG 3401, a minimum campus GPA of 2.0, a minimum GPA of 2.7 in all accounting courses at the 3000-level and above taken at UM-St. Louis, consent of supervising instructor and accounting internship coordinator. Students are employed in the field of Accounting where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. An accounting faculty member will monitor the student's program with the student providing a formal written report at the end of the project.

### **ACCTNG 3495 Special Administration Problems - Accounting (VITA) Program: 1-3 semester hours**

Prerequisites: ACCTNG 2400, ACCTNG 2410 and ACCTNG 3401; minimum campus GPA of 2.0, minimum GPA of 2.3 in all accounting courses at the 2000-level and above taken at UMSL; completion of nine semester hours of accounting. Enrollment in the course is restricted to Volunteer Income Tax Assistance (VITA) program student participants. The class offers practical tax experience, networking opportunities, potential managerial experience, and personal satisfaction derived from community service. It is taken on a satisfactory/unsatisfactory basis. The course offers one to three hours of undergraduate business elective credit and may be repeated for up to 3 hours credit.

### **ACCTNG 3499 Independent Study in Accounting: 1-3 semester hours**

Prerequisites: Minimum campus GPA of 2.0, a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL and approval by the supervising professor and the department chair. Special individual study in accounting under the supervision of a full-time accounting faculty member.

### **ACCTNG 4401 Financial Accounting and Reporting III: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 3402, minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL, minimum campus GPA of 2.0. This course examines accounting theory and practice related to topics such as leases, income taxes, pensions, earnings per share, and share-based compensation. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

**ACCTNG 4402 Financial Accounting and Reporting IV: 3 semester hours**

Prerequisites: MATH 1030, ACCTNG 3402, minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL, minimum campus GPA of 2.0. This course examines accounting theory and practice related to topics such as business combinations, consolidated financial statements, foreign exchange transactions, foreign currency financial statements, segment reporting, and interim (quarterly) reporting. The course includes an emphasis on unstructured problem-solving skills, communication skills, and interpersonal skills.

**ACCTNG 4435 Auditing: 3 semester hours**

Prerequisites: MATH 1105; ACCTNG 3402; ACCTNG 3421 or INFSYS 3810; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. An introduction to auditing practice. Includes the social role of auditing and the services offered by auditors in internal, governmental, and public accounting practice. Emphasis is on the financial auditing process, including professional ethics, audit risk assessment, study and evaluation of internal control, gathering and evaluating audit evidence, and audit reporting decisions.

**ACCTNG 4441 Advanced Federal Income Tax: Business Taxation: 3 semester hours**

Prerequisites: ACCTNG 3441 with a grade of B- or above; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Focuses on federal income taxation of corporations, S corporations, partnerships, LLCs and their owners.

**ACCTNG 4450 Prescriptive Analytics and Optimization: 3 semester hours**

Same as SCMA 4350. Prerequisites: MATH 1105 and a minimum campus GPA of 2.0. This course covers the construction and application of prescriptive analytical models for optimizing business decisions in a wide range of areas such as manufacturing, service, supply chains, logistics and finance. Topics include performance metrics, linear programming, integer programming, network optimization, simulation, and implementation using Excel.

**ACCTNG 5400 Financial and Managerial Accounting: 3 semester hours**

This course provides an introduction to accounting, with emphasis on preparation of financial statements for external parties (financial accounting) and accumulation of cost information to aid internal planning and control (managerial accounting). Topics covered include measurement of assets and liabilities, revenues and expenses, the accounting cycle, financial statements, cost terminology, cost behavior, product costing, and relevant costs for decision making. This course provides the necessary background for ACCTNG 5401.

**ACCTNG 5401 Financial Reporting and Analysis: 3 semester hours**

Prerequisites: ACCTNG 5400 or the equivalent. This course builds on the foundations covered in ACCTNG 5400, emphasizing in-depth analysis of published financial statements. The course begins with discussion of the role of financial accounting information in capital markets and contracting, and continues with examination of a number of specific accounting issues. Students are encouraged to look behind the numbers to better understand the economics of the underlying transactions, and properly interpret what the reported numbers mean about a firm's future prospects.

**ACCTNG 5402 Professional Accounting Research: 3 semester hours**

Prerequisites: ACCTNG 4401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. Discussion of the research tools and methods available to resolve questions concerning accounting standards and practices. Critical analysis of topics of current interest and importance in accounting practice.

**ACCTNG 5403 Graduate Topics: Business Analysis and Reporting: 3 semester hours**

Prerequisites: ACCTNG 4401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This course provides an in-depth examination of business analysis and reporting. Topics will include advanced financial accounting and reporting topics and data analytics applied to business analysis.

**ACCTNG 5404 Professional Accountancy I: 3 semester hours**

Prerequisites: MATH 1030; ACCTNG 2410; a minimum 2.0 campus GPA; graduate standing. This is the first professional-level course in financial reporting. The course includes a study of the conceptual framework underlying Generally Accepted Accounting Principles (GAAP) and issues pertaining to accounting for current assets and liabilities.

**ACCTNG 5405 Professional Accountancy II: 3 semester hours**

Prerequisites: MATH 1030; ACCTNG 3401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; graduate standing. This is the second professional-level course in financial reporting. The course includes an in-depth study of issues pertaining to accounting for operational assets, liabilities and owners equity.

**ACCTNG 5406 Research and Professional Writing in Accounting: 3 semester hours**

Prerequisites: ACCTNG 4401 and enrollment in Master of Accounting Program. This course employs the professional accounting literature and authoritative databases to analyze contemporary issues in accounting. Students will refine their communication skills in preparation for leadership roles in the accounting profession.

**ACCTNG 5408 Fraud Examination: 3 semester hours**

Prerequisites: ACCTNG 3402 or ACCTNG 5405; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This course is designed for graduate students who are interested in fraud and its effects. Students will be introduced to theoretical concepts of fraud and practical responses to it. Course coverage includes an overview of the fraud problem; prevention and detection of fraud; elements of fraud investigation, interview techniques, fraud types, and laws governing the prosecution of fraud cases.

**ACCTNG 5411 Cost Systems Analysis: 3 semester hours**

Prerequisites: MATH 1030; ACCTNG 3401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; graduate standing. The development, interpretation, and use of accounting reports and supplementary information for management planning, control and decision making. Emphasizes the application of relevant cost behavior, control and traceability concepts in the preparation of internal accounting reports, with a secondary emphasis upon product costing techniques as appropriate to financial accounting needs. Topics include break-even analysis, operational budgeting, direct costing, absorption costing, standard costs and variance analysis, business segment analysis, responsibility accounting distribution cost accounting, and gross profit analysis.

**ACCTNG 5412 Graduate Topics in Management Accounting: Controllership: 3 semester hours**

Prerequisite: ACCTNG 3411 or ACCTNG 5411; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of advanced managerial accounting techniques useful in facilitating the planning and control process in the modern organization. Emphasis on the implementation and administration of these techniques, their integration with management information systems, and the organizational role of the corporate accountant.

**ACCTNG 5421 Information Systems in Accounting: 3 semester hours**

Prerequisites: MATH 1030; INFSYS 1800; ACCTNG 2410; ACCTNG 3401; a minimum campus GPA of 2.0; graduate standing. This is a professional-level course in accounting information systems. The course includes examination of transaction cycles, structured analysis and design of accounting information systems, and internal controls.

**ACCTNG 5422 Graduate Topics in Information Systems and Controls: 3 semester hours**

Prerequisites: ACCTNG 3421 or ACCTNG 5421. This course examines the review and evaluation of Information Systems and Controls. Topics include Systems and Organization Controls (SOC) testing, systems testing under Sarbanes-Oxley, and other required systems evaluations and reporting.

**ACCTNG 5435 Graduate Topics in Auditing: 3 semester hours**

Prerequisite: ACCTNG 4435; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of advanced auditing and attestation issues, with an emphasis on operational auditing. Topics include professional ethics, risk analysis, internal control, fraud detection, analytical procedures, determining and assessing operational objectives, and reporting and implementing audit findings.

**ACCTNG 5436 Systems Auditing: 3 semester hours**

Prerequisites: ACCTNG 4435. This course presents a study of techniques involved in the control and audit of computer-based systems. The emphasis is on the review of internal controls at operational and administrative levels and on computer-assisted audit techniques.

**ACCTNG 5441 Tax Research: 3 semester hours**

Prerequisites: ACCTNG 3441; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; or consent of instructor. This course examines tax research tools, methods, and techniques. Students locate and evaluate relevant authoritative tax guidance and apply research tools and methods to resolve real-world questions pertaining to the tax laws. Students will learn to communicate their findings via professionally written tax research memos. A basic understanding of federal income tax law is presumed.

**ACCTNG 5443 Decision Support Systems for Business Intelligence: 3 semester hours**

Prerequisites: ACCTNG 4435 and SCMA 5300. This class examines the applications of data and analytics (models) to support the needs of decision makers. Descriptive, predictive and prescriptive analytics tools are coupled with Big Data and well-designed user interfaces to provide the necessary tools. Topics such as how to construct the data warehouse, how to clean and store data in the appropriate form, how to construct and implement a useful visualization of data, and how to construct and support decision makers are included. DSS component design in response to decision making and business intelligence needs are discussed. Students may not receive credit for both ACCTNG 5443 and INFSYS 6833.

**ACCTNG 5444 Business Analytics and Data Mining: 3 semester hours**

Same as SCMA 6345. Prerequisites: SCMA 5300 and INFSYS 5800. This course concentrates on methods for converting data into business intelligence. It provides knowledge of the principles and techniques for business analytics and data mining. Topics include clustering, pattern recognition, visualization of relationships, predictive modeling, optimization techniques and simulation.

**ACCTNG 5446 Advanced Topics in Taxation: 3 semester hours**

Prerequisites: ACCTNG 3441. Address advanced topics in taxation selected by the instructor.

**ACCTNG 5447 Taxation of Individuals and Businesses: 3 semester hours**

Prerequisites: MATH 1030; ACCTNG 3401 or both ACCTNG 5400 and FINANCE 6590 with the topic 'Practice of Personal Financial Planning' with grades of B or better in both; graduate standing. This is the first professional-level course in taxation. The course includes a general introduction to the concepts of taxation. It will enable students to understand the role of taxes in evaluating decisions typically confronted by individual taxpayers and businesses.

**ACCTNG 5451 Accounting and Auditing in Governmental and Not-for-Profit Entities: 3 semester hours**

Prerequisite: ACCTNG 3402 and graduate standing; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of accounting for use in the public sector and in not-for-profit organizations. Principles of fund accounting and financial reporting for governmental and not-for-profit entities, as well as auditing in the public sector.

**ACCTNG 5465 Principles of Information Security: 3 semester hours**

Prerequisites: ACCTNG 4435 or equivalent. This course is a survey of the vast field of Information Security (InfoSec). It addresses both management and technical aspects of security as relevant to organizations, governments, individuals, and society. Topics covered include fundamental principles of InfoSec and cyber defense, the threat environment, management of InfoSec in organizations, technologies and tools in InfoSec, cryptology/cryptography, web application security, vulnerability management, and current issues. Hands-on labs expose students to basics of penetration testing, applications of cryptography, and vulnerability management. A graduate research paper is required. Student may receive credit for only one of INFSYS 3848, INFSYS 6828, and ACCTNG 5465.

**ACCTNG 5466 Management of Accounting Networks and Security: 3 semester hours**

Prerequisites: ACCTNG 4435. This course focuses on the big-picture implications and challenges of data networking and network security within contemporary Information Technology environments. It covers fundamentals of networking and security implications of data networks with hands-on exercises. Topics include networking layers and standardization of functionality across layers, wired and wireless Local Area Networks (LANs) along with switching and physical layer technologies, Internetworking, supporting and supervisory protocols, application layer protocols, network design and management, and fundamentals of network security. Students will also learn about network protocol analyzers such as Wireshark, virtualization, networking in virtual environments, and how some common networked applications operate by utilizing the network infrastructure. Student may receive credit for only one of INFSYS 3842, INFSYS 6836, and ACCTNG 5466.



**ACCTNG 5467 Advanced Data Security Concepts: 3 semester hours**

Prerequisites: ACCTNG 4435 and either ACCTNG 5465 or INFSYS 6828.

This course provides an in-depth examination of advanced principles of cybersecurity. A broad range of topics are covered, including penetration testing, formal verification of systems, formal models of information flow and protection, distributed system authentication, protocol design and attack, computer viruses and malware, as well as intrusion and anomaly detection models. Multi-level security architecture, active defenses, investigation and forensics, network firewalls, virtualization, anonymity and identity, mobile security, and database security models and mechanisms are also studied. The course content is largely influenced by the latest research in the field. Student may receive credit for only one of INFSYS 3858, INFSYS 6858, and ACCTNG 5467.

**ACCTNG 5468 Accounting Software Assurance: 3 semester hours**

Prerequisites: ACCTNG 4435 and either INFSYS 6805 or INFSYS 6806

(permission of instructor may be obtained to waive the INFSYS 6805 or INFSYS 6806 prerequisite). This course provides an overview of the vast field of software assurance. The goal is to make students aware of the fundamentals of the secure software lifecycle enabling them to apply principles of secure software development and management. The course also provides practical applications that allow the learners to experience the secure software lifecycle process by developing concrete artifacts. Students may receive credit for only one of INFSYS 3868, INFSYS 6868, and ACCTNG 5468.

**ACCTNG 5469 Management of Accounting Data Security: 3 semester hours**

Prerequisites: ACCTNG 4435 and either ACCTNG 5465 or INFSYS 6828.

This course provides students the necessary background knowledge and skills to develop and run a systematic information security management program that is in line with organization strategy, structure, processes, and culture. Specifically, the course introduces governance, strategy, policies, implementation, operation, evaluation, and improvement of an organization's information security to achieve business objectives and be resilient to information security threats. Students may receive credit for only one of INFSYS 3878, INFSYS 6878, and ACCTNG 5469.

**ACCTNG 5490 Graduate Internship in Accounting: 1-3 semester hours**

Prerequisites: ACCTNG 3401 or ACCTNG 5404; a minimum graduate GPA of 3.0; a minimum GPA of 3.0 in all accounting courses at the 3000-level and above taken at UMSL; consent of supervising instructor and accounting internship coordinator. The student works in an accounting internship that contains sufficient content and rigor to merit graduate credit. The student's program will be monitored by a member of the Graduate Faculty in Accounting. The course requires several meetings with the faculty advisor and a graduate-level written assignment. The course will be graded on a Satisfactory/Unsatisfactory basis. A student who has previously taken ACCTNG 3490 may not take ACCTNG 5490.

**ACCTNG 5495 Advanced Special Administrative Problems - Accounting (VITA) Program: 1-3 semester hours**

Prerequisites: ACCTNG 3401 or ACCTNG 5404. Enrollment in the course is restricted to Volunteer Income Tax Assistance (VITA) program student participants. The class offers practical tax experience, networking opportunities, potential managerial experience, and personal satisfaction derived from community service. It is taken on a satisfactory/unsatisfactory basis. The course offers one to three hours of graduate business elective credit and may be repeated for up to 3 hours credit.

**ACCTNG 5498 Graduate Seminar in Accounting: 3 semester hours**

Prerequisites: To be determined each time the course is offered and to include a minimum 2.0 overall GPA and a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. Study of selected special problems in accounting. May be repeated for credit with different topics.

**ACCTNG 5499 Individual Research in Accounting: 1-3 semester hours**

Prerequisites: Consent of instructor, department chair and graduate director; a minimum 3.0 graduate GPA; a minimum GPA of 3.0 in all accounting courses at the 3000-level and above taken at UMSL. Special individual research topics in Accounting under the guidance of a specific professor.

**ACCTNG 6441 Graduate Topics in Taxation - Tax Compliance and Planning: 3 semester hours**

Prerequisites: At least a B in ACCTNG 3441 or ACCTNG 5447; enrollment in Master of Accountancy or Master of Business Administration program; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This course emphasizes advanced topics in personal and business taxation building upon those examined in the previous Income Tax and Advanced Income Tax courses.

**ACCTNG 6460 Data Integration: 3 semester hours**

Prerequisites: ACCTNG 4435. This course discusses the theories and techniques for blending unstructured and structured data including Big Data and social media streams with relational databases, data warehouses, spreadsheets, and other sources of data. It provides hands-on experience in integrating data from diverse sources, screening and cleaning it, and producing descriptive and visual summaries in tables, graphs, maps, and text for business intelligence. Students will be introduced to tools that integrate data from different sources and provide input to dashboards for rich visualization and advanced analytics. Students may not receive credit for both ACCTNG 6460 and INFSYS 6860.