

THE ACCOUNTING PROFESSION IN AMERICA

1. American Accounting Education

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1. AMERICAN ACCOUNTING EDUCATION

The purpose of this paper is to briefly explain the requirements for a degree in accounting from an American college or university. This paper also describes the types of jobs which university graduates may take after graduation. This paper will also describe the quality control of university education in business.⁽¹⁾

I. Higher Education in the United States

In the United States, a student typically has 12 years of education in order to graduate from high school. A student who wishes to continue education will then go to a college or a university. There are over 2,000 colleges and universities in the United States, each with different characteristics. This article can discuss only the most general features of accounting education in the United States. The most recent statistical analysis of accounting education in the United States is Williams (1983). Williams' book has 56 tables of data, and was an important source for this article.

Every student who wants to go to college in the United States can do so. However, some colleges are more selective in their admission requirements than others. While a student can certainly get into a college some where, most students want to be admitted into a more selective school with higher prestige. These selective colleges and universities might have ten applicants apply for admission, for each student actually admitted to study.

Admission into a college or university is determined mostly by grades in high school, and scores on the Scholastic Aptitude Test (SAT). The SAT is given several times a year. There are two parts to the examination, verbal and mathematics. There are separate scores for each part of the examination. Each part's score can range from 200 to 800. A score of 200 is the worst possible score; a score

(1) A list of the abbreviations used in this article is found in Appendix 1.

of 800 is a perfect score. The average, based upon millions of students taking the examination, is expected to be 500. A student with average scores of 500 in verbal and 500 in mathematics would have a combined score of 1,000. Many colleges and universities require higher than average scores for admission. Some of the very best schools have entering classes where the SAT scores of their new students are over 1,200.

In the United States, there are three levels of degrees awarded by colleges and universities: bachelor's degree, master's degree, and doctorate. In order to be a professional accountant in the United States, one must have at least a bachelor's degree in accounting.

A college is a smaller institution of higher learning which grants mostly bachelor's degrees. There are many independent, private colleges in the United States, not supported by public money. A university is much larger than a college, and grants advanced degrees as well as bachelor's degrees. A university is a group of colleges, and often includes professional colleges such as dentistry, law, and medicine.

The first degree from a college or university is a bachelor's degree. This is given after four years of education. Most colleges and universities are on a semester system. This system has been traditional for many years, arising in an agricultural time. There are two semesters in an academic year, so in four years, a student will study eight semesters. By having a course's length shorter than found in Japan, there is greater flexibility in student scheduling. A student can change the course of study and career direction at the end of each semester, rather than only once a year. Even though the course length is relatively short, the faculty quickly get to know the students. Students and faculty interact in question-and-answer discussions in many classes, so there is quick rapport between professors and students.

A semester is 15 weeks of study in most institutions, not including holidays. A school week for accounting students is Monday through Friday. The first semester of the academic year starts in the beginning of September and ends in December, just before the Christmas and New Year's holidays. After a two week recess

between semesters, the spring semester starts in the beginning of January and goes until May. The summer is vacation time. In agricultural times, this permitted students to work on the family farm. Today, colleges and universities offer courses in the summer for those who wish to continue their studies.

To receive a bachelor's degree from a college or university, a student must take a broad course of study. This course of study usually represents about 120 credit hours. In each semester, the student takes five courses for a full course load. Each course meets one, two or three times a week. If a course meets once a week, it is usually a night class with 150 minutes of class time. If it meets twice a week, then it is for two 75-minute classes. If it meets three times a week, then there would be three 50-minute classes. Each of these courses is called a "three credit course." Each student will receive credit for 15 hours a semester, so that in eight semesters, the student has 120 credit hours.

The credit hours must be distributed in a wide variety of courses. There is much variety between colleges and universities on specific requirements for a bachelor's degree. In general, a student would have about 60 credit hours in English, languages, sciences, and other humanities and science courses. A student would have about 30 credit hours in accounting courses, and about 30 credit hours in business courses (such as finance, management, and marketing). Some courses will be required of all students studying for the degree. For example, two courses in principles of economics are required at most colleges and universities. Other courses require students to take classes in a particular area, but the students can decide which course. For example, a course in psychology might be required, but the student can select which one is appropriate. Finally, there are "free electives" where the student can take classes in anything he or she desires. There is no limitation on which courses can be taken to satisfy these free electives. Students are encouraged to take some courses besides business or accounting, just for personal enrichment and enjoyment. For example, they might take courses in theatre, health, art, agriculture, etc. Being able to take any courses as part of a college education reflects the American philosophy of freedom of choice, and the

desire to develop well-rounded graduates. For example, the University of Delaware's catalog on undergraduate programs (1987) shows the following requirements for a major in accounting :

<u>Required Courses</u>	<u>Credit Hours</u>
Humanities, including critical reading and writing	21
Anthropology, Psychology or Sociology	3
Mathematics	6
Communications	12
Science	6
Economics	12
Business Administration, including finance, marketing, and management	27
Accounting	33
Free electives	8
Total	<u>128</u>

At most colleges and universities, about 30 credits hours is required for a major in accounting. A typical curriculum is also found in the University of Delaware's catalog on undergraduate programs (1987). The course requirements are :

<u>Requirement</u>	<u>Credit Hours</u>	<u>Year Taken</u>
Principles of Accounting I	3	2
Principles of Accounting II	3	2
Intermediate Accounting I	3	3
Intermediate Accounting II	3	3
Accounting Information Systems	3	3
Cost Accounting	3	3

Income Tax Accounting	3	4
Advanced Accounting	3	4
Auditing	3	4
Business Law I	3	3
Business Law II	3	3

These courses are described in Appendix 2. The courses are balanced between theory and practice. The student receives material on conceptual material, but also many practice problems to solve. In many classes, problems from past CPA examinations are discussed.

Ethics problems are also discussed. In many schools, the auditing course discusses accountant's ethics. The American Institute of Certified public Accountants, the National Association of Accountants, and the Institute of Internal Auditors all have codes of ethics. These codes of ethics discuss the nature of independence, conflicts of interest, integrity, and due professional care. A common ethical discussion is to present a case where the accountant must define his or her obligation to the company's interests, and balance the obligation to the company against obligations to the public interest. In master's degree programs, ethics may be required as a separate course, or as part of a course on business and society.

Colleges and universities also require that accounting students take at least one course in business law. This course discusses the nature of contracts. This course will also discuss the Uniform Commercial Code (UCC), which governs many business dealings in the United States. The UCC is a model law, which was proposed by the private sector. The UCC has been enacted by most states. This is a matter for state's rights, and not a matter for the federal government.

II. Positions for Graduate Accountants

Someone studying for a bachelor's degree is called an "undergraduate." After four years as an undergraduate, a bachelor's degree (B.S.) in accounting is awarded to approximately 45,000 persons per year, equally divided between men and

women.

In the past 15 years, more women have entered accounting programs, so that now half of all students are women. Women are increasingly found at the highest levels of public accounting, industry, and government. Many women are partners in large and small CPA firms. Over half of all bank officers are women. The Treasurer of the United States government, Katherine Ortega, CPA, is a woman. More information on trends in accounting enrollment by men and women can be found in Stagliano and Stiner (1985).

With a bachelor's degree in accounting, a graduate has a choice of occupational directions. In general, these choices are public accounting, industry, and government. Some will choose not to be employed, and instead continue their education for an advanced degree.

Public accounting in the United States is practiced by large and small firms. About 19,000 of the accounting graduates will enter public accounting, with almost half of them being women (McInnes and MacNeill, 1987). After two years of public accounting experience, most of these accountants have become Certified Public Accountants (CPA). In most states, an accountant must be graduated in order to take the CPA examination. Most accountants take the CPA examination as soon as possible after graduation. The designation "CPA" is a license designation, not an educational degree.

Many students desire to go with public accounting firms to get diverse experience with a variety of clients. Other students make their choices based upon salary, or the desire to be in a particular area of the country. After two or three years in public accounting, the majority of accountants quit the public accounting firm. Most will then go to work for corporations, and a few will work for government. Some will return to school for a graduate degree or have children.

In the United States, CPA firms are mostly partnerships (that is, two or more CPAs) or sole proprietorships (only one CPA). Some states permit the formation of professional corporations by CPA firms, but in that case, all stockholders must be CPAs. The larger CPA firms have larger clients, which have large audits.

These firms have many offices world-wide to service their international clients. Smaller CPA firms are called “regional” or “local” CPA firms. The regional firms have more than one office and may operate in several states. Local CPA firms have only one office, and may have only one CPA as a sole proprietor.

An excellent comparison of the advantages and disadvantages of large and small CPA firms is found in Wheeler *et al.* (1987). The larger CPA firms often have heavy travel schedules. Starting salaries are usually slightly higher for the larger CPA firms. The work is much more structured in large CPA firms, with a great deal of specialization. In the first two years of employment, a staff accountant with a large CPA firm will only work in audit engagements, on perhaps 10 or 15 clients. The smaller CPA firms give diversified experience in audit, tax, accounting services, and management advisory services.

Of those who do not go with public accounting firms upon graduation, the majority will go to work for corporations. These corporations may be involved in mining, manufacturing and marketing. With the increase in service industries, other graduates are attracted to banks, insurance companies, telecommunications, stock brokerages, and other service industries. The advantages here are the highest starting salaries of any area of accounting, excellent training and benefits, and opportunities to be promoted into management.

There are career choices for accounting graduates with local, state and federal governments. State and local governments employ accountants in budgeting, payroll, cost accounting for construction projects, and tax collection. The federal government has most of the activities of the state and local governments. The federal government also has activities which the states do not have, such as regulation of the stock exchanges by the Securities and Exchange Commission (SEC). The federal government employs thousands of accountants. For example, many are employed by the Federal Bureau of Investigation (FBI) and the General Accounting Office (GAO). The GAO is the auditor and adviser to the U.S. Congress. The federal government offers employment to accountants as officers in the army, navy, air force, and coast guard.

Most graduates do not go to work for government immediately after graduation. Many accountants who work in government have had experience in public accounting or industry before entering government service. Once employed in government, most of the professional accountants do not change jobs. The advantages to government are the high job security, regular hours, excellent health and vacation benefits, and assured pension. The disadvantage of government work is the comparatively low pay and sometimes lack of challenging work.

In the United States, there are professional schools for law, medicine, dentistry and other specialities. Students must have a bachelor's degree to enter these schools. A few accounting graduates will use their bachelor's degree in accounting to prepare for entry into law school. Other graduates will not go to work, but instead will continue for a master's degree in either business or accounting. Someone studying for a master's degree or doctorate is called a "graduate student."

Some accountants will work for several years, and then quit their job to return to school for a master's degree. Graduate students who continue their education after the bachelor's degree may be awarded a master's degree in a particular field of study. Usually, it takes two years of study after a bachelor's degree to obtain a master's degree. For accountants, the most common master's degree to receive is an M.B.A. (Master of Business Administration). This is a degree with broad requirements in the study of management, accounting, finance, and quantitative methods. For example, the University of Delaware's *Graduate Catalog* (1987) requires the student to take 48 credit hours. The courses which the student takes depends upon what preparation the entering student had for the B.S. degree. The AACSB requires courses which cover a "common body of knowledge", so the student may have covered the required courses in order to receive a B.S. degree. An M.B.A. curriculum covers a broad range of possible courses in accounting, business administration, finance, economics, and marketing. Examples of required M.B.A. courses are found in Appendix 3.

A less common but equally valuable degree is the M.S. (Master of Science) in

Accounting degree. The curriculum of an M.S. program is mostly graduate accounting courses, and each course discusses an accounting topic in a great deal of detail. A student can choose to write a research paper or thesis for three or six hours of credit. The advantage to the student of such a program is to increase the depth of accounting knowledge in taxation, auditing, computers, financial accounting, or some other specialized area. The late Professor Shigeo Aoki of Waseda University has suggested that Japan consider offering such degrees. He also suggested that Japan consider having professional schools of accountancy.

Other accountants will continue to work and will take master's degree courses at night on part-time basis ; often the employer pays the entire cost of this. The advantage to the employer is that as long as the employee is studying, the employee will not leave the firm. This promotes loyalty to the company, and shows the company is concerned about the employee. The advantage to the employee is saving the cost of tuition. In many companies, getting a master's degree indicates that the employee will be promoted into a management position.

About 50,000 M.B.A. degrees and 4,000 M.S. degrees in accounting are awarded annually in the United States (Stagliano and Stiner, 1985). After receiving a master's degree (either M.B.A. or M.S.), most students return to work in industry or public accounting. Some may teach at smaller colleges.

Some women accountants will interrupt their careers to have children. After being out of the work force several years with small children, getting a master's degree is a popular way for women to update their knowledge of accounting, and improve their career opportunities when they return to work.

A few students who continue after the master's degree will receive doctorates (Ph.D.) in accounting. About 120 doctorates are awarded in accounting each year. The doctorate in accounting is mostly courses in theory for each area of accounting. The principal purpose of the doctoral program is to teach students how to read the scholarly literature in accounting, and how to do research. A typical doctoral program will require 30-45 credit hours of course work after the master's degree. After the doctoral course work, written and oral comprehensive examina

tions which last several days are required. If a student passes, then the student is called "A.B.D.", which is slang for "all but dissertation..." That means everything is finished except writing the dissertation.

A dissertation is required to receive a Ph.D. The dissertation is a thorough discussion of an accounting topic, and must present original research. Some people are unable to do this, and end their career as A.B.D. Those receiving a doctorates will be prepared for careers in teaching and research in colleges and universities. A few Ph.D.'s will work in industry and public accounting after graduation. About one-third of Ph.D. accounting graduates are women (Williams, 1983).

III. Accreditation

To maintain quality of educational programs in higher education, there are several associations which accredit academic programs. The purpose of accreditation is to state that a college or university has met certain minimum standards. In general, the standards relate to admission standards, quality of the faculty, and resources available for instruction. These resources are classrooms, laboratories, library and other facilities available.

There are six regional accrediting groups to accredit colleges and universities as institutions. These accreditation groups are private groups, but recognized by the Office of Postsecondary Education of the federal government's Department of Education. This reflects the typical American attitude that decision-making should be in the private sector where possible.

In addition to the regional accreditation groups, there are accreditation groups for areas of specialization. In the business and accounting areas, there is one recognized accreditation group, the American Assembly of Collegiate Schools of Business (AACSB, 1987). The AACSB accredits colleges of business. There are 262 accredited schools of business. Besides the regional accreditation association, the AACSB sets specific standards for colleges of business. The AACSB sets standards for faculty, resources, and curriculum.

For example, one standard for faculty is that 80% of the full-time faculty should

have Ph.D. or professional degrees (such as a lawyer for teaching courses in business law). A standard for resources is that there must be computer hardware and software for students and faculty.

An example of a standard for curriculum is that very few business and accounting courses should be offered to students in their first two years at the school. Most business courses should be taken at the third and fourth year of school. The curriculum standards also set a "common body of knowledge." This common body of knowledge assures that every student graduating from an AACSB-accredited school will have courses in marketing, economics, ethics, accounting, quantitative methods, computers, and management.

Within the accreditation of colleges of business, it is possible to have accounting programs accredited as well. This is also done by the AACSB. This accreditation of accounting programs is in addition to AACSB accreditation of a college of business (AACSB,1987). There are about 600 departments of accounting in American Colleges and Universities, according to the AACSB. Of these 600 departments, there are 72 departments of accounting which were accredited as of June, 1988.

Three types of programs can be accredited: bachelor's degree, M.B.A. programs with concentration in accounting, and master's degree programs. Again, as there are standards for the college of business, there are additional standards on student quality, faculty qualifications, curriculum and resources. For example, faculty are expected to do research and publish their research.

IV. Conclusion

Everyone who wants to be an accountant in the United States can become one. However, admission into the more selective accounting curriculum at an AACSB-accredited school is more difficult. Graduation from an AACSB-accredited school gives many occupational choices for a graduate. These choices are in public accounting, industry, government, and additional education.

Appendix 1

Abbreviations Used in This Article

- A.A.C.S.B.- American Assembly of Collegiate Schools of Business
A.B.D. - All but dissertation. *Slang*.
A.I.C.P.A. - American Institute of Certified Public Accountants
B.A. - Bachelor of Arts
B.S. - Bachelor of Science
C.P.A. - Certified Public Accountant
F.B.I. - Federal Bureau of Investigation
G.A.O. - General Accounting Office
M.A. - Master of Arts
M.B.A. - Master of Business Administration
M.S. - Master of Science
Ph.D. - Doctor of Philosophy
S.A.T. - Scholastic Aptitude Test
S.E.C. - Securities and Exchange Commission
U.C.C. - Uniform Commercial Code

Appendix 2

Required Undergraduate Courses in Accounting
at the University of Delaware

Principles of Accounting I

“An introduction to financial accounting. Topics: the accounting cycle, merchandise accounting, accounting procedure for cash, receivables, payables, inventories, plant and equipment, payroll, stocks and bonds.”

Principles of Accounting II

“An introduction to managerial accounting. Topics : manufacturing accounting, cost-volume-profit analysis, job-order and process cost accounting, budgeting, standard costs and variance analysis, contribution approach to decision analysis, absorption and direct costing.”

Intermediate Accounting I

“Review of accounting fundamentals including the accounting model and information processing, theoretical foundations of financial accounting, the income statement and retained earnings, the balance sheet and a comprehensive treatment of assets and liabilities.”

Intermediate Accounting II

“Theoretical foundations of financial accounting continued. Comprehensive treatment of corporation accounting, long-term investments in equity securities, accounting for bonds, accounting changes, the statement of changes in financial position, accounting for pension costs, leases and price-level and fair value accounting and reporting.”

Accounting Information Systems

“Accounting information and its place within an organization’s overall management information system. Emphasis on information and document flow, internal control, data organization, and the analysis, design, development, and audit of computer-based accounting systems. Includes some computer work.”

Cost Accounting

“Process, job-order and standard costing; direct and absorption costing; budgeting, decentralization and transfer pricing; cost analysis for managerial applications.”

Income Tax Accounting

“Analysis of recent revenue acts; use of federal law and regulations to determine tax liability.”

Advanced Accounting

“Introduction to branch accounting, consolidations, partnerships, fund accounting for state and local governments, and accounting for international transactions. Other relevant topics may also be covered.”

Auditing

“An introduction to the standards and procedures underlying contemporary auditing. Topics include ethics, legal liability, internal control, audit evidence, audit reports, statistical sampling, and the audit of computerized systems.”

Business Law I

“The formation, use and performance of contracts, including both the common law and the Uniform Commercial Code. Other topics include product liability, negotiable instruments, and accountants’ legal liability.”

Business Law II

“Course covers a variety of areas of the law including agency, partnerships, corporations, unfair competition, debtor-creditor relationships, bankruptcy, secured transactions, real and personal property, wills and trusts.”

Source: University of Delaware, *1987-88 Course Catalog*. (Newark, Delaware, June, 1987), p. 84.

Appendix 3

Required Graduate Courses for M.S. Degree in Accounting at the University of Delaware

Federal Tax Research and Planning

“Introduces the master’s student to the techniques and tools of technical tax research. Using these developing skills, the student begins exploration of the corporate and partnership taxation area.”

Accounting Systems: Analysis and Implementation

“Identifying accounting systems requirements and designing systems to meet these requirements. Topics included are design proposals, cost/benefit considerations, output and input design, file structures and record handling, data communications and internal control.”

Theory of External Reporting

“Study of contemporary models of accounting for information users external to the firm. Includes an examination of the institutional environment and the impact of the institutions on the development of accounting theory and practice.”

Advanced Management Accounting

“Examination of concepts and rationale underlying managerial accounting methods. Advanced topics in cost allocation, standard costing and performance measurement.”

Advanced Auditing

“Analysis of current and prospective developments in professional auditing. Topics include auditing computerized systems and the use of statistical sampling by the auditor.”

One of the following two courses may be required :

Corporate Financial Analysis

“The central focus is toward increasing decision skills in corporate finance by exposure to complex problems in working capital management, capital rationing under resource constraints, and the optimal acquisition and management of capital. Financial theory as well as analytical and numerical techniques are applied to the solution of problems and cases.”

Portfolio Management

“Examines techniques of security analysis. Theory and practice of portfolio management.”

Source : University of Delaware, *1987-88 Course Catalog*. (Newark, Delaware, June, 1987), pp.84, 86.

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