## Overview of Education in the U.S.

The U.S. is composed of 50 states, 5 territories, and the District of Columbia. As a result, education in the U.S. is highly decentralized. Each state has the authority to implement its own educational policy as long as that policy does not violate the U.S. constitution or federal law.

Unlike most other countries, the federal government does not have responsibility over educational requirements or recognition or authorization of institutions at any level. There is no national system of education nor prescribed curriculum. The federal government's primary responsibility with respect to education is making available federal funding to those institutions that qualify based on accreditation mentioned below. Education in the U.S. is extremely diverse and autonomous, with public and private institutions at all levels.

The U.S. education system is as diverse as the states that comprise it. Its lack of homogeneity stems from the disparate groups that settled the country. Each state has its own state Board of Education, responsible for setting education policy, funding, and quality assurance.

Educational institutions at all levels in the U.S. may be public or private. Public refers to governing boards appointed by the state, receive at least some funding from the state budget, and may be subject to certain state regulations. Private institutions are independently controlled, but they must be licensed by state governments; they may be for-profit or non-profit.

The academic year runs from September to May or June. Education in most states is compulsory until the age of 16 , with variations of 17 and 18 in some states. The language of instruction is English.
U.S. higher education is the most extensive and decentralized post-secondary education system in the world. The breadth of higher education in the U.S. can easily be seen by the sheer number of postsecondary institutions, with nearly 6,000 career and technical schools and 4,000 degree-granting institutions.

Most U.S. colleges and universities assign credit hours or units to each subject, whereby one subject per semester for an academic theory course is typically represented by 3 semester credit hours, which corresponds to the number of hours the class meets per week. An academic hour is typically 50 minutes. Laboratory or performance subjects may be reduced to 1 semester credit per 3 hours of inclass time. A full academic load is typically 15 semester credit hours at the undergraduate level and 9 12 semester credit hours at the graduate level.

The philosophy of liberal arts education is unique to U.S. higher education. It focuses on a wellrounded academic education, developing the student's verbal, written, and reasoning skills. It includes courses in a wide variety of studies, including liberal arts and humanities, languages, social sciences, and physical sciences. The goal of a liberal arts education is to develop general knowledge and reasoning, rather than a specific skill-set. The U.S. education structure also differs from many others in that there is one secondary leaving credential, the high school diploma, and one major credential representing completion of each of the three stages of higher education: Bachelor, Master, and Doctoral degrees.

## Primary Education

Early childhood education, also referred to as pre-primary, comes in a variety of forms, including preschool, pre-kindergarten, nursery school, daycare, and kindergarten.

Prior to enrolling in the formal 12-year system of primary and secondary education, students in most states are required to enroll in kindergarten at age 5 . This system is often referred to as K-12.
Compulsory education in the U.S. begins at age 5 but may end at age 14-18, depending on the state.
Primary or elementary schools range from grades 1-7, depending on the state and school district. Middle or junior high schools may serve students from grades 5-9, though most offer grades 6-8. Secondary or high schools enroll students in upper secondary education, usually grades 9-12. The last four years of secondary school are generally referred to as high school.

Pre-university study is comprised of 12 years of education, which consists of grades that are numbered sequentially after kindergarten from $1^{\text {st }}$ through $12^{\text {th }}$ grades. These grade levels may be grouped in a variety of combinations of elementary (primary), middle or junior high (lower secondary), and senior high school (higher secondary), depending on the state and school district:
$6+3+3$
$4+4+4$
$6+2+4$
$8+4$
$6+6$
$5+3+4$

There are no formal graduation diplomas for completion of elementary/primary or middle/junior high, though some school districts may issue a certificate of completion.

## Secondary/High School Education

Regardless of the arrangement or grouping of the various levels of K-12 education, secondary education begins in the $7^{\text {th }}$ grade, when students begin receiving instruction by individual subjectspecific teachers.

On average, high school graduation requirements include 4 years of English, 4 years of history of social sciences, 3 years each of mathematics and science, 2 years of foreign language, 2 years of art, supplemented with additional subjects in related fields, depending on the high school track. Each state sets its own minimum requirements for meeting high school graduation. These requirements are typically expressed in a minimum of credit units that must be earned in grades 9-12, distributed across the six major subject areas. The average number of credits is approximately 20, including credits in non-academic subjects.

The high school diploma is offered in general, technical/vocational, academic college-preparatory, and honors tracks. Regardless of which program is followed, all students who successfully complete the
high school graduation requirements are awarded a high school diploma. There are no national leaving examinations at the completion of high school. Students who have met the graduation requirements for their education track are awarded the High School Diploma after completing $12^{\text {th }}$ grade.

High school students enrolled in a college-preparatory academic or honors track also have the option to take Advanced Placement (AP) subjects and subsequent Advanced Placement exams. The AP program is a cooperative program between U.S. high schools and universities that allow high school students to undertake university-level studies during their high school curriculum. Upon completing the high school studies, students sit for a nationally standardized, external examination in the specific subject(s) which they studied in their high school. The AP subject exams are scored on a range of $1-5$, where 5 is the highest. Colleges and universities in the U.S. set their own minimum requirements, and many institutions have policies for exempting students from university-level courses based on the official AP examination results. Roughly $90 \%$ of U.S. higher education institutions accept Advanced Placement credits for college study.

Another option for high school students to receive advanced standing at the post-secondary level is the College Level Examination Program, or CLEP, offered by College Board. CLEP provides credit-byexam, allowing students to obtain transfer credit that may exempt them from university-level subjects, depending on the receiving institution's policies and the test-takers exam results. CLEP offers more than 30 exams in 5 subject areas (history and social sciences, composition and literature, science and mathematics, business, and world languages). The exams are available at testing centers around the world and are accepted by nearly 3,000 higher education institutions in the U.S.

High school students may also choose to enroll in the International Baccalaureate (IB) Diploma program offered by the International Baccalaureate Organization. The IB Diploma program is aimed at students aged 16 to 19 and is offered in 144 countries. IB Diploma programs are increasingly popular in U.S. high schools. IB Diplomas may be earned by students in addition to or instead of their state high school graduation curriculum. Over 40,000 U.S. students earn IB Diplomas each year.

IB Diploma students must choose one subject from each of five groups: best language, additional language, social sciences, experimental sciences, and mathematics. Students also choose either an arts subject or a second subject from one of the previous groups for further study and examination. Grades are awarded on a 1 to 7 scale, with the higher number representing higher marks. Up to 3 additional points may be added for combined results in theory of knowledge and the extended essay. The IB Diploma is awarded to students who earn at least 24 points, out of a maximum of 45 points.

The International Baccalaureate Diploma Program is an international upper secondary education program that was developed to address the needs of internationally mobile students preparing for university, with a common pre-university curriculum and a common set of external examinations. The IB diploma program is 2 years of study. Generally, students take six subjects, half of which are studied at the higher level and half of which are studied at the standard level.

International Baccalaureate transfer policies may vary from institution to institution, and policies may even been established at the state level. More than 700 colleges and universities in the U.S. and Canada have established a stated policy of accepting the IB Diploma for university admission. Upon
award of the IB Diploma, students will have earned graduation from a college-preparatory high school and may be considered for up to one year of advanced standing, depending on state and institutional policies regarding IB credits.

Students who have not met the graduation requirements or who leave the education system before graduating do not receive any kind of certificate of incomplete education. These students may, however, pursue the General Education Development (GED) tests. Students who pursue a GED may do so via independent study or a formal training program; it is only the results on GED tests that determine their success. The GED exam is comprised of five sections: Language Arts: Writing, Language Arts: Reading, Mathematics, Science, and Social Studies. In order to pass the exam, testtakers must meet minimum passing scores in each section and earn a minimum overall total. Since 2002, test-takers had to pass the entire battery of tests in one sitting. The GED test scores typically appear on an official report that is attached to a state-issued Certificate of High School Equivalency. Successful GED test scores are accepted at most U.S. colleges and universities as completion of high school, though additional test scores or measures of success may also be required.

## Higher/Post-Secondary Education

## Types of Post-Secondary Institutions

There are approximately 9,000 post-secondary institutions in the U.S., of which more than 4,000 are degree-granting colleges and universities and community colleges. The remaining 5,000 are non-degree-granting institutions, providing a variety of vocational, technical, and career-training programs.

## Vocational or Technical Colleges

Career and technical schools offer short training courses and may even often specialized diploma or degree programs. This used to be referred to as post-secondary vocational education. The majority of these institutions are private and for-profit. They are approved and regulated by state governments and may also have national or programmatic accreditation. Post-secondary technical and vocational education usually prepares students for employment in a specific occupation and results in certificate, diploma, or applied Associate degree.

A variety of post-secondary institutions including community colleges, technical institutes, and private career colleges offer occupational or vocational study that are intended to prepare high school graduates for employment. These programs are not intended to lead to further education in academic college or university programs.

## Community/Junior Colleges

Community colleges are typically public, comprehensive institutions offering a variety of educational programs from adult and community education, post-secondary career and technical studies, and academic or professional programs leading to university transfer. Some community colleges have even begun offering accredited bachelor degree programs. Most community colleges have articulation
transfer agreements with local colleges and universities allowing qualified students to complete an approved curriculum of study into a Bachelor program with up to 2 years of undergraduate study.

## Colleges and Universities

Colleges and universities in the U.S. represent those higher education institutions offering degree programs. Historically, college referred to institutions offering only undergraduate studies, while universities were those institutions that also engaged in graduate-level education, but that distinction no longer exists. Within the category of colleges and universities, there exists some delineation. Baccalaureate colleges typically offer education that focuses on undergraduate programs, with some limited graduate study. Master's colleges and universities are those that award undergraduate and graduate degrees, but few of their graduate degrees are doctorates. Research or Doctorate-Granting Universities are those higher education institutions that have high research activity and award significant doctoral degrees. Higher education institutions in the category of colleges and universities may also include professional schools, which are typically (but not always) graduate-level programs offering education professional degrees such as law, medicine, dentistry, and others.

## Military Academies

Military academies, junior colleges, colleges and universities in the U.S. offer education at the secondary, Associate, and Bachelor degree levels. Post-secondary military institutions in the U.S. are all recognized by one of regionally accredited bodies.

## Admissions to Higher Education

Admissions to higher education institutions in the United States include a variety of requirements that extend beyond the basic benchmark of the high school diploma or high school equivalency certificate because each institution establishes it own admissions requirements, based on its mission and goals. These different requirements can include specific preparation in particular subjects, grades, standardized test scores, and even non-academic requirements. Some higher education institutions are centralized, where a single admissions unit makes admissions decisions for all prospective applicants at that academic level or for the entire institution, whereas other institutions may have a decentralized admissions policy, where each individual department makes its own admissions decisions and has its own separate admissions requirements.

At the higher education level, there are a variety of admissions strategies, on a spectrum ranging from open admissions to highly selective admissions requirements. Open door or open admissions policies typically require only proof of high school graduation or equivalency and a minimum age requirement but are otherwise very flexible with respect to grades, academic preparedness, standardized test scores, and other common admissions policies. Open door admissions is usually available to all students who provide proof of high school graduation or equivalency and who are over age 18. Selective institutions, on the other hand, implement increasingly stringent requirements depending on where they fall on the spectrum of moderately selective, selective, and highly selective admissions policies.
Admissions to undergraduate colleges and universities in the U.S. typically require standardized test
scores such as the College Board's SAT or ACT exams.
The SAT is composed of three sections: math, critical reading, and writing. Each of the three sections is scored on a range from 200 to 800 points, with 2400 as the perfect score. The national average for the SAT is approximately 1500 . The SAT also offers separate subject tests that may complement or enhance a college admissions application.

The ACT consists of four sections: English, reading, math, and science. Each section is assessed on a range from 1 to 36 , and test-takers are also assigned a composite ACT score, which is an average of the four sections (also on a range from 1 to 36). Scores of 20-21 are the national average for the composite score on the ACT.

Admissions to graduate programs follows a similar pattern in that most graduate programs require standardized tests such as the GMAT or GRE.

The Graduate Management Admissions Test (GMAT) is a standardized business school entrance examination. The GMAT measures verbal, quantitative, and analytical writing skills. The most common graduate-level entrance examination is the Graduate Record Examination, or GRE, offered by the Educational Testing Service. The GRE is required most often by graduate schools and assesses the same categories of education as the GMAT.

Law schools typically require the LSAT, or Law School Admission Test, while medical programs generally require the MCAT, or Medical College Admission Test.

## Higher Education Structure and Institutions

A significant aspect of U.S. higher education is the liberal arts curriculum. Higher education in the U.S. emphasizes a general studies core component with increased specialization later on. Typically, the first two years of a Bachelor degree may be referred to as a core curriculum, and the final two years of upper division studies in a Bachelor program may consist primarily of advanced studies in the field of specialization, or the major.

Higher education in the U.S. is decentralized and extremely diverse, comprised of more than 4,000 degree-granting institutions, ranging from junior colleges/community colleges to doctoral-degreegranting universities. The distribution of the 4,000 higher education institutions includes nearly 1,200 two-year institutions and more than 3,000 regionally accredited colleges and universities offering degree programs.

The terms college and university are often used interchangeably in U.S. higher education. Historically, a college was intended to identify those institutions that offered only Bachelor degree-level studies or pre-degree university programs, and university was utilized to identify those institutions offering graduate-level studies. However, as institutions have increasingly offered more programs at different levels, these terms no longer fit these narrow definitions. The term college may even refer to an individual unit or faculty within a larger university institution.

The academic year in the U.S. typically runs from September to May/June. The academic year is usually divided using two main strategies: the semester system and the quarter system. The most common calendar distribution in U.S. higher education is the semester calendar, which is typically comprised of $15-16$ weeks. The quarter system is usually $10-12$ weeks. The type of calendar system affects study load (enrollment) and is usually notated on the transcript or in a transcript explanation. An academic year under the semester system is typically divided into the Fall and Spring semesters, whereas the academic year under a quarter system is divided into Fall, Winter, and Spring. Both of these systems also often optional summer semesters or quarters.

As a mechanism for quantifying the relative weight of different educational subjects, most higher education institutions in the U.S. assign credit values to each subject. One semester credit represents one contact hour per week for a period of 15 to 16 weeks, in the semester system. Most academic theory classes are represented by 3 contact hours per week for the duration of the semester and are therefor assigned 3 semester credits. On the quarter system, one quarter hour represents one contact hour per week for a period of 10 to 12 weeks.

Practical instruction, such as laboratory work or internships is quantified differently than in theoretical classes. In practical studies, 1 semester credit typically represents 2 to 3 hours of practical instruction, laboratory work, music or visual arts practice, or other non-theory work per week.

Each credit represents approximately 2 hours of outside preparation, which includes assigned reading, homework, studying, writing papers, projects, group work, exam preparation, and research. A single theory class in the semester system that meets 3 contact hours per week represents 6 hours of outside preparation and 3 contact, for 9 hours of education per week for 15 to 16 weeks.

A full-time academic load is typically 15-18 semester credits per semester, or 30 to 36 semester credits per year.

A 4-year Bachelor degree under the semester system requires anywhere from 120 to 144 credit hours, or approximately 40-48 courses. A Bachelor program typically includes a progression from a broad base to increased specialization, while Master's degrees are very specialized, usually focusing on a single discipline.

Academic degree titles are not government by federal law. As a result, colleges and universities have wide discretion in the terminology and nomenclature of their degrees and program requirements. Naming conventions for similar program may vary widely between institutions.

Adult education is comprised of three main categories: adult basic education, providing instruction in reading, math, and other critical skills below the secondary education level. This may include English language proficiency. Adult secondary education is geared towards those who were unable to complete high school as scheduled and are desirous of passing the GED program. Continuing professional education is a specific type of adult continuing education provided to those who are working in specific licensed occupations. These occupations require their professionals to take refresher courses on a regular basis in order to have their licenses renewed.

## Undergraduate Study

Undergraduate education refers to post-secondary education leading to an Associate or Bachelor's degree. U.S. Bachelor degree programs are considerably less specialized than similar degrees from other countries. Approximately 40-60\% of the curriculum is devoted the major field of study, while the remainder of the 4- or 5-year program focuses on general education studies.

Associate degrees that are earned in professional, technical, or terminal programs are often referred to as Associate of Applied Sciences or Associates of Applied Arts, but will sometimes carry the name of the program of study instead.

Community colleges in the U.S. typically offer a variety of educational programs, ranging from GED preparation and English language learning, career training, vocational or technical training, and 2- to 3year Associate's degrees. Within the realm of Associate degrees, community or junior colleges typically differentiate between those Applied Associate programs that are terminal in nature and intended for career placement as a mid-level professional (such as dental assistant or engineering technician) and those academically-oriented Associate of Arts or Sciences programs that are intended for transfer to a 4-year college or university with advanced standing for the first two years. Transfer Associate degrees, as the latter are frequently referred, rely on articulation agreements between the community college and its nearby colleges and universities. Some states have implemented a statewide core curriculum that may be completed in its entirety at a community college, allowing students to easily transfer into the third year of a Bachelor degree program.

The Bachelor's degree is the most common first degree in the U.S., and it represents completion of the first stage of the U.S. higher education structure.

Honors Bachelor degrees may also be awarded. They involve more independent study, typically require a thesis or graduation project, and usually have additional admissions requirements.

In a 4-year Bachelor degree program, the first year of full-time study is typically referred as the freshman year, and students enrolled in that year are also referred to as freshman. The second year is referred to as the sophomore year and its students are sophomores. These two years together make up the lower division studies, which typically have few prerequisites and may constitute the majority of the institution's core curriculum. With variations by state, general education studies at the lower division level typically include education in English, foreign language, natural sciences, social sciences, mathematics, and some electives. The third year represents the first year of upper division studies focusing on the specific major field and is referred to as the junior year; its students are likewise identified as juniors. The fourth or senior year of upper division undergraduate studies culminates in a minimum of 120 semester credits (or 180 quarter credits).

A Bachelor degree typically requires a minimum of 4 years of full-time undergraduate study. Bachelor degree programs in engineering, accounting, architecture, or pharmacy may require either 4 or 5 years of study, depending on the institution.

Post-Bachelor certificates are specialized certificates or diplomas that can be earned at the same time as a Bachelor's degree or shortly after. They typically require completion of 1 or 2 semesters and may be completed as part of a degree program. They are not a separate degree level and are not degrees.

Select students who wish to advance their education without being enrolled in a specific degree program may be enrolled as non-degree students. Non-degree students are typically limited in the number and type of courses they may take. Based on institutional policy, non-degree students might or might not be able to transfer a limited number of courses into a degree program at a later time.

## Graduate Study

Graduate studies are those that require at least a Bachelor's degree for admissions, including graduatelevel certificates, Master's and Doctoral degrees.

Master's degrees in the U.S. require a Bachelor's degree for admissions. They may also require a standardized examination such as the GRE or GMAT. The Master's degree varies in duration from 1 to 3 years. Master's degrees typically require 18 months to 2 years for completion, but the time period may depend on a 9 - or 12-month academic year and whether or not the student is enrolled full- or parttime, since many programs are geared towards working professionals. Depending on the program and institution, the Master's degree may be comprised of anywhere from 30 to 60 semester credits.

The Master's degree is the first graduate level qualification and represents completion of the second cycle of higher education. Master's programs can be characterized as either academic/research degrees or professional degrees.

An academic Master's and a professional Master's differ in that an academic degree consist of a research-based component and may lead to further education at the doctoral level, while a professional Master's degree is oriented towards advancement in a particular profession.

Graduates of a research-oriented Master's program are typically awarded a Master of Arts or Masters of Science. Master's degrees awarded in academic fields are generally research degrees that require graduate-level courses and seminars, comprehensive exams and research, and preparation of a Master's thesis or additional coursework or project.

A Master's degree may be considered a terminal, professional degree, such as the Master of Fine Arts, Master of Business Administration, Master of Social Work, or Master of Education. Master's degrees awarded in professional fields may be structured similar to research degrees as in Engineering, or they may be structured to prepare students to work in a particular profession at the advanced level, such as the Master of Business Administration. Professional internships or other project may be required in lieu of a thesis in a professional Master's degree program.

The third cycle and highest academic credential in the U.S. education system is Doctor of Philosophy (PhD) or Earned Doctorate. Doctoral programs are structured programs of advanced study and supervised research, including seminars and colloquiums, written comprehensive exams, and research, writing, and defending the dissertation.

Doctoral degrees range from 3-5 years of study beyond a Bachelor's degree or 2-4 years of study beyond a Master's degree. Admissions requirements vary by institution, with many institutions
requiring a Master's degree for admissions, but others accepting exceptional students directly from a Bachelor degree in a related field. Some Doctoral programs offer a formal pass-through Master's degree, whereby students admitted directly into a Doctoral program fulfill the requirements for the Master's degree while working towards their doctorate.

A U.S. Doctoral degree typically requires completing a certain number of course credits, maintaining a specific grade average, passing qualifying examinations after coursework, and presenting and defending a dissertation as a result of original research, and passing an oral examination.

Doctoral programs may also be offered as a professional degree, without the expectation of theoretical research contribution of the academic Doctor of Philosophy. The professional Doctoral program might or might not require a dissertation, but applied or professional research is the goal of these advanced studies. Professional doctoral programs may include the Doctor of Education, Doctor of Engineering, and other professional or specialist doctoral degrees.

Post-docs or Post-doctoral research studies are advanced research programs in areas of pure research professions. They are a method by which academic faculty can advance in their careers. They exist most commonly in natural sciences, biomedical sciences, and applied sciences. It is a way for new PhDs to further establish their research credentials, participate in major research projects, and gain valuable research experience.

## First Professional Degrees

First professional degrees in the U.S. require students to have previously completed undergraduate coursework or degrees before enrolling. As a result, they are considered graduate-level study in the U.S. but are the first degree offered in these professional fields, and are thus referred to as first professional degrees. They are closely regulated by recognized professional and specialized accrediting bodies.

Professional degrees in the U.S. are typically taken after some component of Bachelor degrees, though the most successful candidates for admission typically have earned a Bachelor degree.

Examples of first professional degrees and their minimum pre-professional studies include:
Juris Doctor - 3 to 4 years
Doctor of Pharmacy - 2 years
Doctor of Medicine - 3 to 4 years
Master of Divinity - Bachelor degree
First professional degrees are those that are offered after completing some minimum amount of undergraduate study - up to or including a Bachelor degree - followed by the professional degree, which typically requires an additional 3 to 4 years of specialized study.

JD, DM, etc. These are professional titles and not earned doctorate $(\mathrm{PhD})$ degrees.

## Certification or Licensure

The process of certification and licensure reside under the control of individual states. Specifically, many states require that the individual graduate from a program that is accredited by a recognized programmatic accrediting body in order to sit for certification or licensing exams. Most first professional degree programs in the U.S. represent only the academic component of a particular profession. Graduates must also sit for the state licensing examination in order to practice in the professional field.

The U.S. also includes professional credentials that are not academic degrees, such as Registered Nurse or Certified Public Accountant or other licensed professions. These are individual certifications, usually by a state licensing board, that grants them access to practice in the specific profession. These are not degree programs. In some instances, a degree is required to practice the profession but not in all.

## Accreditation or Educational Authority

None of the different levels of education conclude with a standardized final examination. As a result, the content of the specific program or degree must be examined, and accreditation is critical in the U.S. education sector. Accreditation is a self-regulating process of quality control to ensure minimum standards of academics and administrative competence, and to promote mutual recognition of qualifications.

Since there is no national education system, the federal government has no authority over higher education institutions. The responsibility for administering educational requirements at the primary, secondary, and higher education levels is traditionally delegated to school districts at the pre-university level and at the state level for tertiary education. Higher education accreditation is the responsibility of voluntary, non-governmental accrediting bodies that create and implement standards for institutions.

Higher education institutions in the U.S. are not recognized or authorized by the federal government. Instead, their authority to grant degrees is conferred on them by state governments. Higher education institutions typically seek accreditation as a basic indicator of meeting specific minimum standards. Accreditation arose out of the need to conduct non-governmental peer evaluation of institutions and programs.

State approval to operate is not the same as institutional or programmatic accreditation. Institutions that are approved to operate by a particular state but are not accredited by a recognized accrediting agency might not be recognized in other states, and their degrees and credits might not be accepted for university admissions or employment purposes. Only accreditation by a recognized accrediting body assures recognition.

There are two types of recognized accrediting bodies in the U.S. Federally recognized accrediting bodies are those that are approved by the U.S. Department of Education (DOE) that grants access to federal funding. Other accrediting agencies that are recognized by professional and state licensing authorities but do not necessarily provide access to federal funding are recognized by the Council for Higher Education Accreditation, or CHEA. CHEA recognition confers academic legitimacy on

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accrediting organizations. U.S. Department of Education recognition is required for accrediting bodies whose institutions or programs seek eligibility for federal student funds.

The U.S. federal government and the U.S. Department of Education do not have legal power to recognize higher education institutions or programs, to inspect, to offer quality assurance, or to assign educational standards. However, they do approve the accrediting agencies that are able to certify institutions or programs that are able to receive federal funds. The U.S. Department of Education is involved in education at the national level in variety of ways: implementing laws related to federal funding for education, collecting data and overseeing research on America's schools and sharing that information with the public, identifying major problems in education and focusing attention on them, and enforcing federal laws prohibiting discrimination in institutions or programs that receive federal funds.

Typically, degree-granting authority comes from the state government, but there are some institutions that are established by the U.S. Congress, including military service academies and related institutions and some colleges operating in the District of Columbia. The majority of degree-granting institutions operate under the legal authority granted to them by the state government in which they were established.

Accreditation in the U.S. serves a variety of purposes, including quality assurance, access to federal funding by the institutions and its students, ease of transfer, and ensuring employer confidence. A public higher education institution must be authorized to operate by the state government. A private higher education institution must be licensed by the state government. However, in most states, an institution may be authorize to operate or be licensed without being accredited.

There are three types of accrediting bodies in the U.S.: regional, national, and professional or programmatic.

Regional accrediting bodies typically accredit comprehensive institutions that may offer undergraduate and graduate degrees and instruction in a variety of fields. Regional accreditation is the most widely accepted accreditation in the U.S. It is accreditation at the institutional level, and many regionally accredited institutions only accept credits or degrees from other regionally accredited institutions. Regional accrediting agencies are recognized by CHEA. Regional accreditation is composed of five key features: self-study, peer review, site visit, actionable recommendations from the accrediting body, and ongoing external review.
Regional accreditation is the most common type of institutional accreditation among U.S. higher education institutions. There are six regional accrediting bodies. They are non-profit and organized by geographic location. They accredit institutions based on the level of education offered, including elementary and high school, vocational and technical institutions, 2 -year institutions, 4 -year institutions offering the Bachelor's degree as the highest degree, and research or doctoral institutions awarding graduate degrees.

Nationally accredited institutions are also accredited at the institution level, but they are specialized institutions, such as career colleges, religiously-affiliated institutions, or other like-minded institutions. National accreditation refers to those accrediting agencies that accredit specialized or special interest
institutions, including independent colleges. It does not refer to a national education system or governmental activity. It is not synonymous with regional accreditation. National accrediting agencies, which may also be referred to as specialized accrediting agencies, tend to accredit specialized institutions offering instructions in only a few subjects, such as law, medical, theology, or performing arts. Some nationally accredited institutions, particularly religiously-affiliated institutions, may also attain regional accreditation.

Professional or programmatic accreditation is focused on a specific program within a higher education institution. Engineering and architecture are prime examples. In many instances, professional licensure can only be achieved by completing a program that is recognized by a particular professional accrediting body. Programmatic accrediting agencies are accrediting specific programs of study at higher education institutions and not the entire institution. They typically operate in specific subject fields that provide professional education for meeting state licensing requirements. Professional accreditation is only required in the U.S. for professions involving public safety, such as engineering, paramedical and medical studies, and architecture.

Examples of programmatic accrediting bodies include:
American Bar Association (ABA)
Accreditation Board for Engineering and Technology (ABET)
Association to Advance Collegiate Schools of Business (AACSB)
National Architectural Accrediting Board (NAAB)
Nationally accredited institutions are frequently single-purpose institutions, including distance learning colleges and universities, private career institutions, and faith-based colleges and universities. The majority of these are non-degree and for-profit. Comparatively, most regionally accredited institutions are degree-granting and not-for-profit.

Since state governments oversee the structure of higher education, many state agencies publish information about diploma mills and accreditation mills. Some state agencies even publish lists of unapproved, unaccredited, or illegal education providers whose educational documents are not able to be used in that state for purposes of further education or employment.

## Teacher Education

With respect to teacher education, public school teachers are required to be licensed by the teacher certification authority of the state in which they hope to teach. Each state offers and administers its own teacher certification examination. Those who are certified to teach in one state are not eligible to teach in another state, unless the two states have a reciprocity agreement, which is not common.

## Grading

Grading systems are not consistent throughout the U.S., either based on education level or state. The decision on the grading system to be used resides solely with the educational institution, and many
higher education institutions utilize different grading schemes depending on level of education or academic department. There is no nationally mandated grading scale.

Two types of grading systems exist in the U.S.: norm-referenced grading and criterion-referenced grading. In norm-referenced grading, students are actually competing for grades. Even though they work independently, they are being ranked. Only the top performers in a certain percentage will receive an A grade, a set percentage will receive a B grade, and so forth. The assumption is that students are roughly equally in ability, and the goal is to select the very best performers at each level. This type of grading is typically used in fields of study where there are more students than available jobs, such as in law and medicine, which are both highly competitive and over-enrolled programs.

In Criterion-referenced referenced grading, students are graded on a fixed number scale, and they are not compared to other students. They are graded based on the requirements for the program or course. The grade is based on the individual performance of the student, and the scale does not change based on the quality of the student or the size of the class. This type of grading is used when the quality of students is unknown or uneven, and there is no external driving force to reduce the pool of eligible students.

Some institutions also use pass/fail systems. This is typically used when the work being evaluated is highly subjective, there is no generally accepted standard, or the requirement is simply meeting a minimum standard.

## Glossary

## Types of Post-Secondary Institutions

Vocational or Technical Colleges

Career and technical schools offer short training courses and may even offer specialized diploma or degree programs. This used to be referred to as post-secondary vocational education. The majority of these institutions are private and for-profit. They are approved and regulated by state governments and may also have national or programmatic accreditation. Post-secondary technical and vocational education usually prepares students for employment in a specific occupation and results in certificate, diploma, or applied Associate degree.

A variety of post-secondary institutions including community colleges, technical institutes, and private career colleges offer occupational or vocational study intended to prepare high school graduates for employment. These programs are not intended to lead to further education in academic programs.

## Community/Junior Colleges

Community colleges are typically public, comprehensive institutions offering a variety of educational programs from adult and community education, post-secondary career and technical studies, and academic or professional programs leading to university transfer. Some community colleges have even begun offering accredited bachelor degree programs. Most community colleges have articulation transfer agreements with local colleges and universities allowing qualified students to complete an approved curriculum of study into a Bachelor program with up to 2 years of undergraduate study.

## Colleges and Universities

Colleges and universities in the U.S. represent those higher education institutions offering degree programs. Historically, college referred to institutions offering only undergraduate studies, while universities were those institutions that also engaged in graduate-level education, but that distinction no longer exists. Within the category of colleges and universities, there exists some delineation. Baccalaureate colleges typically offer education that focuses on undergraduate programs, with some limited graduate study. Master's colleges and universities are those that award undergraduate and graduate degrees, but few of their graduate degrees are doctorates. Research or Doctorate-Granting Universities are those higher education institutions that have high research activity and award significant doctoral degrees. Higher education institutions in the category of colleges and universities may also include professional schools, which are typically (but not always) graduate-level programs offering education professional degrees such as law, medicine, dentistry, and others.

## Military Academies

Military academies, junior colleges, colleges and universities in the U.S. offer education at the secondary, Associate, and Bachelor degree levels. Post-secondary military institutions in the U.S. are all recognized by one of regionally accredited bodies.

## Academic Year, Semester Credits, and Quarter Credits

The academic year in the U.S. typically runs from September to May/June. The academic year is usually divided using two main strategies: the semester system and the quarter system. The most common calendar distribution in U.S. higher education is the semester calendar, which is typically comprised of $15-16$ weeks. The quarter system is usually $10-12$ weeks. The type of calendar system affects study load (enrollment) and is usually notated on the transcript or in a transcript explanation. An academic year under the semester system is typically divided into the Fall and Spring semesters, whereas the academic year under a quarter system is divided into Fall, Winter, and Spring. Both of these systems also often optional summer semesters or quarters.

As a mechanism for quantifying the relative weight of different educational subjects, most higher education institutions in the U.S. assign credit values to each subject. One semester credit represents one contact hour per week for a period of 15 to 16 weeks, in the semester system. Most academic theory classes are represented by 3 contact hours per week for the duration of the semester and are therefor assigned 3 semester credits. On the quarter system, one quarter hour represents one contact hour per week for a period of 10 to 12 weeks.

Practical instruction, such as laboratory work or internships is quantified differently than in theoretical classes. In practical studies, 1 semester credit typically represents 2 to 3 hours of practical instruction, laboratory work, music or visual arts practice, or other non-theory work per week.

Each credit represents approximately 2 hours of outside preparation, which includes assigned reading, homework, studying, writing papers, projects, group work, exam preparation, and research. A single theory class in the semester system that meets 3 contact hours per week represents 6 hours of outside preparation and 3 contact, for 9 hours of education per week for 15 to 16 weeks.

A full-time academic load is typically 15-18 semester credits per semester, or 30 to 36 semester credits per year.

## Undergraduate and Graduate Study

Undergraduate education refers to post-secondary education leading to an Associate or Bachelor's degree. Graduate studies are those that require at least a Bachelor's degree for admissions, including Master's and Doctoral degrees.

In a 4-year Bachelor degree program, the first year of full-time study is typically referred as the freshman year, and students enrolled in that year are also referred to as freshman. The second year is referred to as the sophomore year and its students are sophomores. These two years together make up the lower division studies, which typically have few prerequisites and may constitute the majority of the institution's core curriculum. With variations by state, general education studies at the lower division level typically include education in English, foreign language, natural sciences, social sciences, mathematics, and some electives. The third year represents the first year of upper division studies focusing on the specific major field and is referred to as the junior year; its students are likewise
identified as juniors. The fourth or senior year of upper division undergraduate studies culminates in a minimum of 120 semester credits (or 180 quarter credits).

## Certification or Licensure

The process of certification and licensure reside under the control of individual states. Specifically, many states require that the individual graduate from a program that is accredited by a recognized programmatic accrediting body in order to sit for certification or licensing exams. Most first professional degree programs in the U.S. represent only the academic component of a particular profession. Graduates must also sit for the state licensing examination in order to practice in the professional field.

The U.S. also includes professional credentials that are not academic degrees, such as Registered Nurse or Certified Public Accountant of other licensed professions. These are individual certifications, usually by a state licensing board, that grants them access to practice in the specific profession. These are not degree programs. In some instances, a degree is required to practice the profession but not in all.

## Accreditation or Educational Authority

None of the different levels of education conclude with a standardized final examination. As a result, the content of the specific program or degree must be examined, and accreditation is critical in the U.S. education sector. Accreditation is a self-regulating process of quality control to ensure minimum standards of academics and administrative competence, and to promote mutual recognition of qualifications.

Since there is no national education system, the federal government has no authority over higher education institutions. The responsibility for administering educational requirements at the primary, secondary, and higher education levels is traditionally delegated to school districts at the pre-university level and at the state level for tertiary education. Higher education accreditation is the responsibility of voluntary, non-governmental accrediting bodies that create and implement standards for institutions.

Higher education institutions in the U.S. are not recognized or authorized by the federal government. Instead, their authority to grant degrees is conferred on them by state governments. Higher education institutions typically seek accreditation as a basic indicator of meeting specific minimum standards. Accreditation arose out of the need to conduct non-governmental peer evaluation of institutions and programs.

State approval to operate is not the same as institutional or programmatic accreditation. Institutions that are approved to operate by a particular state but are not accredited by a recognized accrediting agency might not be recognized in other states, and their degrees and credits might not be accepted for university admissions or employment purposes. Only accreditation by a recognized accrediting body assures recognition.

There are two types of recognized accrediting bodies in the U.S. Federally recognized accrediting bodies are those that are approved by the U.S. Department of Education (DOE) that grants access to federal funding. Other accrediting agencies that are recognized by professional and state licensing authorities but do not necessarily provide access to federal funding are recognized by the Council for Higher Education Accreditation, or CHEA. CHEA recognition confers academic legitimacy on accrediting organizations. U.S. Department of Education recognition is required for accrediting bodies whose institutions or programs seek eligibility for federal student funds.

The U.S. federal government and the U.S. Department of Education do not have legal power to recognize higher education institutions or programs, to inspect, to offer quality assurance, or to assign educational standards. However, they do approve the accrediting agencies that are able to certify institutions or programs that are able to receive federal funds. The U.S. Department of Education is involved in education at the national level in variety of ways: implementing laws related to federal funding for education, collecting data and overseeing research on America's schools and sharing that information with the public, identifying major problems in education and focusing attention on them, and enforcing federal laws prohibiting discrimination in institutions or programs that receive federal funds.

Typically, degree-granting authority comes from the state government, but there are some institutions that are established by the U.S. Congress, including military service academies and related institutions and some colleges operating in the District of Columbia. The majority of degree-granting institutions operate under the legal authority granted to them by the state government in which they were established.

Accreditation in the U.S. serves a variety of purposes, including quality assurance, access to federal funding by the institutions and its students, ease of transfer, and ensuring employer confidence. A public higher education institution must be authorized to operate by the state government. A private higher education institution must be licensed by the state government. However, in most states, an institution may be authorize to operate or be licensed without being accredited.

There are three types of accrediting bodies in the U.S.: regional, national, and professional or programmatic.

Regional accrediting bodies typically accredit comprehensive institutions that may offer undergraduate and graduate degrees and instruction in a variety of fields. Regional accreditation is the most widely accepted accreditation in the U.S. It is accreditation at the institutional level, and many regionally accredited institutions only accept credits or degrees from other regionally accredited institutions. Regional accrediting agencies are recognized by CHEA. Regional accreditation is composed of five key features: self-study, peer review, site visit, actionable recommendations from the accrediting body, and ongoing external review.

Regional accreditation is the most common type of institutional accreditation among U.S. higher education institutions. There are six regional accrediting bodies. They are non-profit and organized by geographic location. They accredit institutions based on the level of education offered, including elementary and high school, vocational and technical institutions, 2-year institutions, 4-year institutions
offering the Bachelor's degree as the highest degree, and research or doctoral institutions awarding graduate degrees.

Nationally accredited institutions are also accredited at the institution level, but they are specialized institutions, such as career colleges, religiously-affiliated institutions, or other like-minded institutions. National accreditation refers to those accrediting agencies that accredit specialized or special interest institutions, including independent colleges. It does not refer to a national education system or governmental activity. It is not synonymous with regional accreditation. National accrediting agencies, which may also be referred to as specialized accrediting agencies, tend to accredit specialized institutions offering instructions in only a few subjects, such as law, medical, theology, or performing arts. Some nationally accredited institutions, particularly religiously-affiliated institutions, may also attain regional accreditation.

Professional or programmatic accreditation is focused on a specific program within a higher education institution. Engineering and architecture are prime examples. In many instances, professional licensure can only be achieved by completing a program that is recognized by a particular professional accrediting body. Programmatic accrediting agencies are accrediting specific programs of study at higher education institutions and not the entire institution. They typically operate in specific subject fields that provide professional education for meeting state licensing requirements. Professional accreditation is only required in the U.S. for professions involving public safety, such as engineering, paramedical and medical studies, and architecture.

Examples of programmatic accrediting bodies include:
American Bar Association (ABA)
Accreditation Board for Engineering and Technology (ABET)
Association to Advance Collegiate Schools of Business (AACSB)
National Architectural Accrediting Board (NAAB)
Nationally accredited institutions are frequently single-purpose institutions, including distance learning colleges and universities, private career institutions, and faith-based colleges and universities. The majority of these are non-degree and for-profit. Comparatively, most regionally accredited institutions are degree-granting and not-for-profit.

Since state governments oversee the structure of higher education, many state agencies publish information about diploma mills and accreditation mills. Some state agencies even publish lists of unapproved, unaccredited, or illegal education providers whose educational documents are not able to be used in that state for purposes of further education or employment.

## College-Preparatory High School Education

High school students enrolled in a college-preparatory academic or honors track also have the option to take Advanced Placement (AP) subjects and subsequent Advanced Placement exams. The AP program is a cooperative program between U.S. high schools and universities that allow high school students to undertake university-level studies during their high school curriculum. Upon completing the high
school studies, students sit for a nationally standardized, external examination in the specific subject(s) which they studied in their high school. The AP subject exams are scored on a range of $1-5$, where 5 is the highest. Colleges and universities in the U.S. set their own minimum requirements, and many institutions have policies for exempting students from university-level courses based on the official AP examination results. Roughly $90 \%$ of U.S. higher education institutions accept Advanced Placement credits for college study.

Another option for high school students to receive advanced standing at the post-secondary level is the College Level Examination Program, or CLEP, offered by College Board. CLEP provides credit-byexam, allowing students to obtain transfer credit that may exempt them from university-level subjects, depending on the receiving institution's policies and the test-takers exam results. CLEP offers more than 30 exams in 5 subject areas (history and social sciences, composition and literature, science and mathematics, business, and world languages). The exams are available at testing centers around the world and are accepted by nearly 3,000 higher education institutions in the U.S.

High school students in the U,S. may also choose to enroll in the International Baccalaureate Diploma (IB Diploma) program offered by the International Baccalaureate Organization. The IB Diploma program is aimed at students aged 16 to 19 and is offered in 144 countries. IB Diploma programs are increasingly popular in U.S. high schools. IB Diplomas may be earned by students in addition to or instead of their state high school graduation curriculum. Over 40,000 U.S. students earn IB Diplomas each year.

IB Diploma students must choose one subject from each of five groups: best language, additional language, social sciences, experimental sciences, and mathematics. Students also choose either an arts subject or a second subject from one of the previous groups for further study and examination. Grades are awarded on a 1 to 7 scale, with the higher number representing higher marks. Up to 3 additional points may be added for combined results in theory of knowledge and the extended essay. The IB Diploma is awarded to students who earn at least 24 points, out of a maximum of 45 points.

The International Baccalaureate Diploma Program is an international upper secondary education program that was developed to address the needs of internationally mobile students preparing for university, with a common pre-university curriculum and a common set of external examinations. The IB diploma program is 2 years of study. Generally, students take six subjects, half of which are studied at the higher level and half of which are studied at the standard level.

International Baccalaureate transfer policies may vary from institution to institution, and policies may even been established at the state level. More than 700 colleges and universities in the U.S. and Canada have established a stated policy of accepting the IB Diploma for university admission. Upon award of the IB Diploma, students will have earned graduation from a college-preparatory high school and may be considered for up to one year of advanced standing, depending on state and institutional policies regarding IB credits.

