Design Drafting Program Curriculum Certification

PACKAGE CONTENT

and

PROGRAM DESCRIPTION

FOR

SECONDARY

&

POSTSECONDARY SCHOOLS

Section I

GENERAL

A. Purpose

Curriculum Certification Explained

B. Process

2011-12 Curriculum
Certification Package

INSTRUCTIONS

SECTION - I. GENERAL

SECTION - I. GENERAL continued

C. ELIGIBILITY FOR CERTIFICATION

The reliability of the following criteria depends upon establishing and adhering to an equitable procedure of evaluation.

SECTION - I. GENERAL continued

4. Physical Plant

Note: The ADDA requires that there be one student space (minimum) that meets the requirements of the Americans with Disabilities Act or have available a space that can be quickly converted to allow accessibility. Keeping in-mind the classroom must be arranged for physically challenged individuals to access printers, plotters, and other classroom equipment.

Floor Space: Space should be adequate space to accommodate the processes described in the curriculum certification package submitted. ADDA requires a drawing of the classroom and lab indicating the location of all furniture and equipment be submitted with this certification package..
Classroom: approximately 22 sq. ft. per student;
Manual board drawing room: approximately 75 sq. ft. per student

To accommodate all students, avoid the use of labs and drawing rooms by more than one class at the same time.

ADDA requires upon submission of materials, drawings and photographs indicating the physical size, shape, and dimensions of the lab and classroom areas.

Equipment: Equipment in drawing labs should be equivalent to the minimum acceptable equipment used in industry, and should be supplied in sufficient quantity to permit usage by all students without "doubling up." All equipment should be in good condition and provisions should be made for adequate storage. Laboratory and shop equipment should be adequate for student use and for demonstration.

ADDA requires upon submission of materials, photographs indicating the equipment &, placement within the classroom and lab areas.

SECTION - I. GENERAL continued

5. Types of Curriculum Certified

SECTION - I. GENERAL continued

8. Industry Advisory Committee

ADDA requires that schools have or establish an Advisory Committee composed of three or more

Section II

CURRICULUM EVALUATION

SECTION - II. CURRICULUM EVALUATION continued

3. Curriculum Analysis – Classifications Explained

ADDA Curriculum Certification is awarded in Two Divisions for 4 Major Classifications. Schools which provide and work under areas which offer academic areas of study to compliment a diploma or degree will be certified under the Scholastic Division, whereas schools which offer non-academic areas of study within the program criteria or as a supplement to the program will be certified under the Technical Division.

Divisions - Scholastic & Technical

The difference between the Scholastic and Technical Divisions relate only to programs which offer academic courses in conjunction with the Technical Training.

Classifications
Apprentice Drafter
Drafter
Design Drafter
Designer

The difference between the Classifications relates only to the quantity, depth and level of Technical Training provided within the course structure.

Contact Hour Conversion Formulas

It is ADDA's intent provide a fair and equal opportunity to all institutions to meet the hourly instruction in all subject matters related to training and education in the design drafting trade. In order to accomplish this fairness ADDA works to assure future employers an understandable baseline of hands-on instruction in each subject area.

ADDA bases Curriculum Certification on minimum contact hours related to physical instruction, required lab time, practical exposure time and research required to complete each specific study area using the following formulas to convert.

1 Semester Hour	=	75 Contact Hours
1 Quarter Hour	=	50 Contact Hours
1 College Lab Hour	=	15 Contact Hours
1 Hour High School Class	=	150 Contact Hours for entire year
1 Block High School Class	=	150 Contact Hours for entire year

The application of the above formulas cannot alone serve as a basis for conclusion, but it does produce a figure which special consideration should be given with respect to quantity of content and additional academic level of courses when included in the curriculum.

SECTION - II. CURRICULUM EVALUATION continued

3. Curriculum Analysis – Classifications Explained continued

a. Apprentice Drafter
Secondary Schools - Magnet High Schools - Post Secondary Schools
Vocational Technical School - Technical Schools - Community Colleges

The evaluation for this program will be based on the training institute's ability to insure the student is provided with instruction that covers the minimum subject content listed in the "ADDA Apprentice Drafter Objectives for the related discipline and related contact hours of training."

Additional cumulative contact hours may be obtained through projects, research and additional studies required and take place outside the classroom environment.

Also required, are the related academics and supporting programs listed under the appropriate certification Classification Level listed in Section II – B – 1 Apprentice

b. Drafter
Some High Schools - Some Magnet High Schools - Vocational Technical School
Technical Schools – Post Secondary Schools – Community College

The evaluation for this program will be based on the training institute's ability to insure the student is provided with instruction that covers the minimum subject content listed in the "ADDA Certified Drafter Objectives for the related discipline and related contact hours of training."

Additional cumulative contact hours may be obtained through projects, research and additional studies required and take place outside the classroom environment.

Also required, are the related academics and supporting programs listed under the appropriate certification Division and Classification Level listed in Section II – B – 1 Drafter.

Also under the Drafter Classification the Apprentice Classification may be instructed under the same discipline.

B. ADDA CLASSIFICATIONS OF CURRICULUM

It is recognized that instruction and training in the field of drafting and/or design can be given in various degrees and levels of accomplishment. The following outline indicates the specifications applying to the levels of curriculum, ranging from secondary schooling to a university degree. It is not intended herein that the terms limit or establish industry classifications or identifications having similar designations.

Each Discipline areas, such as Mechanical Engineering, Architectural, Piping or AEC Engineering are considered different courses and required individual course certification.

ADDA does offer multiple course discounts on the certification process and specific courses can be jointly used, requiring minimal material submission to complete multiple area certifications.

APPRENTICE DRAFTER CLASSIFICATION

Vocational Technical College
Vocational Training Schools or Institutions – High Schools

Hour Legend CH (HSC)	= Contact Hours -High School Credits *Note – 1 High School Credit (1 hour Class) = 150 contact Hours* *1 High School Credit = 2 College Semester Hours*
900 - (06)	TECHNICAL DRAWING for RELATED DISCIPLINE AREAS ***Mechanical*** *(Basic Core Mechanical Drafting)* ***Architectural*** *(Basic Core Architectural Drafting)*

SECTION - II. CURRICULUM EVALUATION continued

B. ADDA CLASSIFICATIONS OF CURRICULUM continued

DRAFTER LEVEL CLASSIFICATION

DRAFTER – Community College or Associate Degree
Vocational Technical College or School, Some Vocational Schools or Institutions

Hour Legend CH -SH- (QH) = Contact Hours -Semester Hours- (Quarter Hours)	
1500 -20- (26) *Note: 800 hours should cover the basic core drafting requirements*	TECHNICAL DRAWING for RELATED DISCIPLINE AREAS ***Mechanical*** *(Machining Design, Jig and Fixture ,Illustration, etc* ***Architectural*** *(Residential, Light Commercial, etc.* ***AEC Design*** *(Commercial Construction, Structural, etc* ***Civil / Survey*** *(Surveying, Topographical, Boundary, GIS, etc.* *Piping, Electrical, HVAC, Aerodynamics, and others Available*
300 -04- (06)	DESCRIPTIVE GEOMETRY *Descriptive Geometry can be included within technical drawing course but additional hours must be added.*
450 -06- (07)	PHYSICAL SCIENCES *Physics, Chemistry, Note, Earth Sciences and Biological Science can be accepted based on discipline of course.*
450 -06- (08)	TECHNICAL MATH *Algebra*, Trigonometry*, Analytic Geometry, Algebraic Operations, Solutions of Equations, Coordinate Geometry, Applications,*
300 -04- (06)	SUPPORT PROCESSES *Machine Shop, Welding, Foundry, Concrete Production, Construction Based Courses, Surveying, Carpentry, Properties of Materials, Electricity, Numerical Controls, etc.*
300 -04- (06))	COMMUNICATIONS *English Composition*, Report Writing, Speech* *Note: ADDA will accept 4 years of high school level English as credit toward a Technical Level Certification.*
300 -04- (06) *Note: These components can be inclusive within the design training.*	RELATED SPECIALTY COURSES *Keyboarding & Business Machines, Desktop Software, Computer Operations, Computer Aided Drafting, Hydraulics, Economics, Accounting, Programming, etc*

SECTION - II. CURRICULUM EVALUATION continued

B. ADDA CLASSIFICATIONS OF CURRICULUM continued

DRAFTER LEVEL CLASSIFICATION continued

900 -12- (16) INSTITUTIONAL REQUIREMENTS

Subject matter to satisfy special institutional requirement, e.g., History, Government, Physical Education, etc.

Total 4500 Contact Hours	*Under Certain Conditions based on the schools operational practices, certification will be considered for 50 or more semester hours.* *Equates to 60 Semester Hours or 80 Quarter Hours*

End of Drafter Level Classification Requirements.

SECTION - II. CURRICULUM EVALUATION continued

B. ADDA CLASSIFICATIONS OF CURRICULUM continued

DESIGN DRAFTER CLASSIFICATION

Two Year College Programs or Some Associate Degree Programs
Technical College and Institutional Programs and
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SECTION - II. CURRICULUM EVALUATION continued

B. ADDA CLASSIFICATIONS OF CURRICULUM continued

DESIGNER LEVEL CLASSIFICATION continued

Contact Hours
- Semester Hours-
(Quarter Hours)

Subjects

SECTION - II. CURRICULUM EVALUATION continued

C. SUBJECTS

1. Drawing Courses

For DESIGNER or DESIGN DRAFTER, the curriculum must be equally complete in the theory and technique of drafting, but must also extend into the field of engineering and design with which they are associated. They must encompass the ability to make use of graphic principles in the solution of problems relating to design/drafting.

The curriculum for DRAFTER and APPRENTICE DRAFTER should contain not only basic but advance drawing courses in one or more specialized fields. The courses should provide the student with a complete foundation in the theory and technique of drafting. They should offer training to develop manual skill in the use of instruments, the ability to do neat, legible, free-hand lettering and sketching in the area of specialization and computer-aided drafting (CAD) systems.

It is understood that drawing courses involve not only drawing board and CAD practice in a formal class but also lecture, discussion and individual guidance, as may be suitable, from an instructor present in the class. It is recommended that, when applicable, “Design” courses include a finished drawing product, as well as computation and access to and use of catalogs, standard parts lists, commercial accessories, etc., as may be necessary.

2. Applied Technical Courses (includes basic sciences)

Courses which equip the drafting student with technical information directly related to their ultimate duties as a drafter, and without the use of which they could be no more than a copyist, are classified as Applied Technical Specialties.

In the area of Machine Drafting, courses falling under this heading include such subjects as Metallurgy, Mechanics, Materials & Testing, Metal Shop, Machine Operations, Production Planning, Chemistry, Physics, and Computer Science.

These courses should be strongly recommended to the student to consider part of the core needs of any individual entering the design, drafting, engineering or architectural profession.

These professions can include individuals who work in the support professions such as material estimators, technical illustrators, machinist, quality control technicians and many others that are directly tied to the overall design professions.

SECTION - II. CURRICULUM EVALUATION continued

C. SUBJECTS continued

3. Mathematics

The DRAFTER curriculum should include Algebra I, and Geometry, and Trigonometry at the post-high school level. In the Designer and Design Drafting Classifications, Analytic Geometry and Calculus should be required or integrated in design courses. It is expected the treatment be oriented towards the needs of the profession. Additional advanced math programs are strongly suggested but is understood all schools may not have these available as part of the schools overall curriculum.

4. General Subjects (English, Communications, Leadership, Humanities, and others)

Subjects that contribute to the overall improvement of a student and to his or her development as a citizen, which are not directly related to his or her activities as a designer or drafter, are included under this heading. All levels include an allowance for studies under this general heading.

D. ADMISSION REQUIREMENTS

The quality of any training program is dependent to a great extent upon the prior preparation of students accepted for participation.

It should be understood of the student that drafting is a program based on engineering and science. These subjects should be promoted as necessary training to coincide with drafter training on the secondary level to deliver a well rounded and qualified apprentice drafter.

The minimum admission requirements for all post-secondary courses of study should be as follows:

1. Graduation from an accredited secondary school unless in a qualified apprenticeship program at a qualified school or the equivalent education substantiated by the method recognized by the state in which the institution is located.

2. A demonstrated desire and capacity for the satisfactory achievement of the work outlined in the curriculum.

END OF SECTION II

SECTION - III. CERTIFICATION PROCEDURE

A. SUBMISSION OF APPLICATION FORMS AND FEE

A school desiring certification should submit the application package with appropriate fee to ADDA Corporate Offices requesting consideration toward certification. A current copy of the school catalogue, showing details of curriculum and descriptions of courses and credits, should be attached. The purpose of the application is to report the various details of administration, aims, equipment, facilities, staff qualifications, enrollment, graduate's records, and curriculum.

SECTION - III. CERTIFICATION PROCEDURE continued

D. AWARD OF CERTIFICATION

Assuming favorable completion of the evaluation, a Certificate will be prepared and awarded to the school. Announcement of Certification will be made in the Association's newsletter, *Design Drafting News,* and will be posted on the Association's web site (http://adda.org).

The awarding of the Certificate is evidence that the curriculum has been evaluated and approved by ADDA and that it has been found satisfactory as claimed in the Statement of Purpose (see page 1). A school whose drafting or design curriculum is officially certified by ADDA is entitled to use and publish for the duration of the Certification the statement: "This Curriculum is Certified by the American Design Drafting Association at the ___* Level."

** Drafter, Apprentice Drafter*

E. STUDENT RECOGNITION CERTIFICATES

Upon request by the school, certificates noting completion of a certified program will be provided for students who have properly completed all requirements of the approved curriculum.

The school should send a list of names and addresses of graduating students to the ADDA corporate office well in advance of graduation dates.

There will be a $2.00 charge for each certificate issued plus shipping cost.

F. DURATION OF CERTIFICATION

Certification is valid for one year and is effective from the issue date through August 31, yearly.

G. TERMINATION OF CERTIFICATION

The Certification may be canceled or for any one of the following reasons:

1. A lessening or weakening of the curriculum.
2. An unfavorable report from the school's Advisory Committee.
3. Failure to submit an Annual Renewal Report to ADDA
4. Failure to provide additional verification details
5. False information issued in annual report
6. Information submitted that cannot be validated
7. Violation of the ADDA Code of Ethics
8. Failure to pay the annual renewal fee.

SECTION - III. CERTIFICATION PROCEDURE continued

G. TERMINATION OF CERTIFICATION continued

Should the Certification be invalidated the following items must be followed:

1. Discontinue announcing ADDA's Certification of their curriculum.
2. Discontinue publicizing the ADDA's Certification of their curriculum
3. Return the Curriculum Certification Certificate to the Corporate Office
4. Discontinue administering the Certification Examinations under the Curriculum Certification clause of the Testing Site Criteria

ADDA Procedures upon Certification Invalidation

ADDA reserves the right to post, print, publish and notify disciplinary actions taken against any school or institution to the membership, departments of education, and any other public, private, or government agency that has interest in the ADDA certification process, for the purpose of strengthening and safeguarding the validity and reputation of this association and it's membership.

H. LEVELS OF CERTIFICATION AND FEES

- Each program will be reviewed for its content and requirement.
- Unless otherwise requested programs will be certified based on core drafting practices and the academic requirements set forth by the state department of education.

DESIGNER	$500.00
DESIGN – DRAFTER	$450.00
DRAFTER	$400.00
APPRENTICE DRAFTER – Post-Secondary and above	$350.00
APPRENTICE DRAFTER – Secondary Only	$300.00

*ADDA currently offers a "Digital Technician" Graphic Design Curriculum Certification program.
- Available in Singular Modules i.e. "Digital Photography Technician"
- Available in a Complete 4 year High School Program "Certified Digital Technician"

END OF SECTION III

Section IV

APPENDIX

A. . . . . TEST OBJECTIVES

B. . . . . EQUIPMENT LIST

SECTION - IV: APPENDIX

A. TEST OBJECTIVES

SECTION - IV: APPENDIX

B. RECOMMENDED EQUIPMENT

The following is a list of recommended equipment for schools seeking ADDA Curriculum Certification at the Drafting Level.

Software

It is recommended that any software used for educational purposes be compatible with the requirements of employers within the school's service employment area or the geographic area where the majority of students are employed upon program completion.

Example:

Softwares D & E are used at 14 companies having a total of 100 employees.
Software C is used in only one company but employs 25 of my 30 graduates annually.

Software C should be your primary software training.
Other software should be used in conjunction for student exposure and flexibility.

Also, Software is now becoming very specialized to specific disciplines. This brings a heavy burden within the training program of all schools.

Concentrate training on the concepts of CAD operation and not on specific software. Architectural firms will use something totally different than Civil or Mechanical firms. Also as you approach specialized markets such as Automotive, Aeronical, Naval Architecture and even HVAC, you will find specific software for each of these areas.

You cannot train for everything. Stick to the basics. A good student can quickly adapt and change between softwares in just a matter of weeks. A student with the conceptual knowledge of how CAD operates will normally be productive enough to make simple drawing changes within a day or two.

SECTION - IV: APPENDIX

B. RECOMMENDED EQUIPMENT LIST

SECTION - IV: APPENDIX

B. RECOMMENDED EQUIPMENT LIST

SECTION - V: APPLICATION FOR CURRICULUM CERTIFICATION

1. HOW TO FILE

Download the Curriculum Certification Package from the ADDA Website.
Go To > Curriculum Certification
Then to > "read more" under the Curriculum Certification Package
Then > Download the "Curriculum Certification Package"

This Download is a WinZip File and requires the WinZip Software to open.
If you do not have this FREE software, download from the displayed page.

Within the download you will find 25 Folders, Named Tabs 1 – 25.
These Folders contain the required information and forms.

Provide the information as requested. Save the information back into the folder.
When Complete, Save to a Compact Disk and Ship as directed.

2. FILE TAB CONTENTS

The certification information is to be provided ONLY on a Compact Disk (CD)

The Curriculum Certification Package on the website contains the following information.

SECTION - V: APPLICATION FOR CURRICULUM CERTIFICATION

2. FILE TAB CONTENTS continued

4. Statement of Purpose
   (Provide on Institution Letterhead)

5. Advisory Committee / Craft Committee List
   (Include Name-Telephone Numbers-Addresses)

6 Advisory Committee / Craft Committee Minutes
   (Include all minutes and meeting notes)

7. Curriculum Analysis
   (Form Provided)

8. Faculty Information Sheet
   (Form Provided)

9. Program Information
   List the program for which you are requesting certification
   i.e., Classification III-IV Architectural

10. Equipment List
    (Provide on Institution Letterhead)

11. Text Books Used
    (Provide on Institution Letterhead)

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12. Advisoryy