

IDEA Drafting-Design Competition - Rules and Regulations

General Information:

1. There is a \$7.00 entrance fee per student for regional competition. There is no additional registration fee for contestants that advance to the state competition.
2. Instructors who are not members by December 1st of the current school year must pay a \$30.00 membership fee to I.D.E.A. before students will be registered for the competition.
3. Entry is limited to three (3) entrants and one (1) alternate of each instructor's students per division. When the regional site cannot handle entry numbers, each teacher will be allowed to enter two students per division.
Note: In an effort to increase attendees, additional entrants may be allowed upon approval by your Regional and State Directors.
4. Exception to Number 3: Due to space limitations, the Architectural CAD category is divided into 2D and 3D competitors, but each school is still limited to 3 entrants for Architectural CAD. This exception was created to allow for two methods of solving the architectural CAD problem, yet not adding a complete category in all regional schools. Each region may handle this division as space requirements dictate.
5. Competition drawings and grading sheets may be picked up by the competitors after the awards ceremony.
6. Students enrolled in Industrial Technology programs meeting more than 1.5 hours per day may NOT compete in the Introductory Divisions.
7. The goals and objectives of the competition dictate that students must compete at their feeder Community College, if it is a regional site, or otherwise at the nearest regional site.
8. For exceptions to Number 7, contact the State Competition Director to facilitate a check on available space at another competition site, and the Director will need to evaluate the implications of the exception.
9. A student can only be registered in one division.
10. First and second place winners will qualify to advance to the state competition.
11. Students NOT registered for the regional competition will NOT be allowed to compete. Only regional competitors can qualify to attend the state competition.
12. Check for entry deadlines in the registration materials.

Eight Award Divisions:

1. **Introductory Board:** Entrants must have had **less than one year of high school drafting**. Competitors will draw specified views of a given drawing problem. The drawing solution is a multiview problem, and will fit on either "A" or "B" size media. Competitors may also be asked to check 2D distances between specified corners of the object. Recommended time limit: 1.5 hours for the multiview drawing and distance checking.
2. **Introductory CAD:** Entrants must have had **less than one year of high school drafting**. Competitors will draw specified views of a given drawing problem. The solution will be designed to fit on either "A" or "B" size media. Competitors will also be asked to check 2D distances between specified corners of the object. Recommended time limit: 1.5 hours for the multiview drawing and distance checking.
3. **3D CAD Modeling:** Entrants may have more than one year of high school drafting. Competitors will model small objects within a designated time period. Entrants will calculate volume and distance checks of the objects modeled. The time limit will vary from 1 - 1.5 hours. Usually, there will be MORE problems than most students can do, but the student who scores the most correct volume and distance check points will be the winner.
4. **3D Assembly Modeling:** Entrants may have more than one year of high school drafting. Competitors will model a number of parts and assemble them. The problem will best be solved with a parametric constraint-based modeling program such as Inventor™ or Solidworks™. Recommended time limit: 1.5 hours.
5. **2D Machine CAD:** Entrants may have more than one year of high school drafting. Competitors will draw specified views (orthographic, auxiliary and/or sectional) from given pictorial or orthographic views in inches or metric. The solution will include dimensioning and notes and will fit on "B" or "C" size media. Recommended time limit: 1.5 hours. Note: This is still a 2D drawing problem. No 3D modeling will be allowed to assist with problem solving. Instructors are discouraged from allowing students to draw 2D drawings with programs that are primarily 3D programs. For example, even though a student might be able to create a 2D drawing with Inventor without using 3D models, this is NOT something that an instructor should coach a student to do!
6. **Architectural Board:** Entrants may have more than one year of high school drafting. Competitors will design and/or draw specified views, details, or sections using materials, specifications and drawings provided. The drawing will fit "B" or "C" size media. Recommended time limit: 1.5 hours.
7. **Architectural CAD (2-subdivisions):** Entrants may have more than one year of high school drafting. Competitors will design a solution and then either draw or model specified views, details, or sections from materials, specifications and drawings provided. The drawing(s) will fit "B" or "C" size media. Recommended time limit: 1.5 hours.

NOTE: CLARIFICATION FOR THE ARCHITECTURAL 2D CAD DIVISION – STUDENTS MAY NOW BRING A TEMPLATE START FILE THAT HAS LAYERS SET UP AND SYMBOL LIBRARIES ON HAND. IT IS NOT PRACTICAL THAT STUDENTS CREATING 2D CAD DRAWINGS ALSO CREATE SYMBOLS FROM SCRATCH, NOR SPEND TIME SETTING UP LAYERS, LETTERING STYLES, DIMENSION STYLES, ETC. BE AWARE THAT NOT ALL COMPUTERS HAVE THE SAME DRIVE TYPES, SO VERIFY WITH YOUR REGIONAL DIRECTOR THAT YOUR METHOD OF BRINGING TEMPLATES FILES OR SYMBOL LIBRARIES WILL WORK, BE IT MEMORY STICK, CD, FLOPPY DISK (SURELY NOT!), ETC.

NOTE 2: Depending on the regional setup and enrollment, there may be two sets of winners within the Architectural CAD division. Entrants must designate **2D or 3D when registering. Students who “draw” all the views using drafting procedures will be judged separately from those who “model” the building and use software to create the views. 3D modeling will only be allowed for entrants who specified 3D on their registration form. These entrants will use 3D modeling tools within programs such as AutoCAD Architecture™, Revit™, ArchiCAD™, SoftPlan™, etc. Entrants who marked 2D on their form must create all the views without using 3D models. EVEN THOUGH 3D PROGRAMS CAN DRAW 2D VIEWS, the 2D Division is for those who use 2D CAD commands (LINES, DIMENSIONS, TEXT, ARCS, etc.) such as AutoCAD™ and MicroStation™. Check with the Regional Director for specifics. Not all regional directors are able to provide both options for this division.**

Board Competitors:

Students in this field are responsible for providing their own board drafting equipment at the regional and state competition sites. Competitors are to provide the following recommended equipment for both regional and state competitions:

1. Drawing board with T-square, parallel rule, or drafting machine (Minimum size 20" X 24").
2. Triangles (45 degree and 30/60 degree)
3. Scales: Customary inch and/or metric for Introductory; Mechanical Engineer's scale with decimal inches, fractional inches, and/or a metric ruler or scale for the Machine division; Architect's scale for the Architectural division.
4. Protractor
5. Eraser (manual), erasing shield, brush, dry cleaning pad, powder, or dust rag
6. Drafting tape
7. Compass or full instrument set
8. Lead sharpening device
9. Pencils or lead holders with appropriate leads
10. Circle template (up to 2")
11. Ellipse template (up to 2")
12. Backing paper (18" X 24")
13. Pocket calculator

CAD Competitors:

Regional:

Teachers or students should check with the Regional Director of their site to see what equipment will be available for the student competitor to use. If a site has a limited number of CAD systems, a Regional Director may allow students to bring their own system. **Some Regional Directors may have to offer CAD competitions in shifts, so entrants may wish to bring reading or study materials in case of waiting a turn.**

State:

At the state competition at ISU, only current versions of the Autodesk products will be provided. Students using programs other than AutoCAD™, Inventor™, and Revit Architecture™ will be allowed to bring their own CAD system. Even at the state competition, students wishing to bring their own system for the products above could make arrangements to do so. In 2013 & 2014, state competitors in the 3D CAD Modeling, and Intro CAD divisions were required to take their own computers to ISU, and were provided only with table space and a power strip, and that will likely be the case again in 2015. Due to enrollment issues at some regionals, regional directors may wish for some students to bring their own systems. In addition, students should be coached on how to deal with generic installations of Autodesk products that may be different than their home school. For the state competition, teachers are encouraged to contact the assistant competition director, Ryan Brown, and double-check available system setups.

All Competitors:

Scoring:

1. Qualified judges, from industry when possible, will score problems in each division.
2. Drawing problems will be judged on completeness, accuracy, line quality, lettering and neatness. CAD problems will be judged on completeness, accuracy, line types and dimensioning, and with various "spot-check" rubrics.

Prizes:

1. A first place plaque will be awarded in each division at each regional site. At the state competition, the 1st place teacher will also receive a plaque. SINCE 2011: At the state competition, students will be awarded medals instead of plaques.
2. Additional vendor prizes (such as CAD software or drafting tools or textbooks) may be awarded if available.

Responsibilities:

1. Student transportation is the responsibility of the participating schools and instructors or parents.
2. The student, instructor, and parents are responsible for being adequately prepared for the above events.
3. While the hosting sites will take careful measures during the competitions, the I.D.E.A. organization, regional sites, and/or ISU are NOT responsible for students and their respective CAD systems while attending these competitions. Participating teachers, students, and parents should take necessary steps to meet the liability requirements of their respective institutions.
4. The I.D.E.A. organization, regional sites, and/or ISU are NOT responsible for students as they travel to and from the regional and/or state competition sites. Teachers should take necessary steps to meet the liability requirements of their respective institutions.

IDEA Annual Drafting-Design Competition

Timetable for the 2015 Competition



February 7th – Regional Registration Deadline:

1. Download the XLSX registration form from the IDEA website and fill in the information.
2. Email the file as an attachment to JoeSieczkowski@u-46.org.
3. Print the XLSX Spreadsheet and send by U.S. Mail with fee payment to:
Attn: Joe Sieczkowski
IDEA Financial Director
224 Juniper Circle
Streamwood, IL 60107

NOTE: Send by registered mail if concerned about deadline.

4. **NEW IN 2015 – The Financial Director will create a master enrollment file and share it with the Competition Director and Regional Directors, so you do NOT need to send the registration form to them.**

February 20th – Regional Registration Update:

If there are changes to your final counts, you may email your Regional Director and you may also email Randy Jacobs at IDEA@heartland.edu

March 6th – IDEA regional competition at the Regional Competition Site

Alternate dates for regions that cannot facilitate the March 6 date can be a week ahead or a week later. Contact the Competition Director for clarification, and to give notice.

April 1st – State Registration Deadline:

- A. Registration qualifier XLSX forms for the state competition need to be emailed by the **REGIONAL DIRECTOR** by April 1st. This is a critical deadline for state competition planning.
- B. Individual teachers should also confirm and assist with state planning by emailing an XLSX RSVP form of their qualifying students, with an indication of those who plan to attend, to the Assistant Competition Director, Ryan K. Brown, email: rkbrown@ilstu.edu

April 11th – IDEA State Competition at ISU in Normal, Illinois

ILLINOIS DRAFTING EDUCATORS ASSOCIATION

Randy Jacobs, IDEA Competition Director
Heartland Community College
1500 West Raab Road
Normal, Illinois 61761



January 13, 2015

Dear Drafting Educator:

The Illinois Drafting Educators Association has appreciated the support of drafting teachers for several decades now. For years, many community colleges and other institutions have taken on the time-consuming task of running a drafting/design competition as regional sites for secondary programs, and we are excited to continue this great tradition. We are again calling on you and your colleagues to participate in the **38th IDEA Regional Drafting-Design Competition** that will be held on **Friday, March 6, 2015**, at regional sites across the state. *NOTE: In case of regional date conflicts, an alternate date may be chosen.* First and second place regional winners will be eligible to compete at our state competition to be held on **April 11, 2015**, at Illinois State University in Normal. Last year, over 100 teachers and 1,000 students were involved at the regional level.

This year's paperwork will again be handled primarily via the IDEA web site, including regional site locations, calendar of events, rules and regulations, entry forms, and updates. Please check the web site -<http://www.idea-online.org/> and look under the [Competitions](#) link.

NEW IN 2015: We continue to seek ways to register the hundreds of entrants. This year, we will be changing the entry form from an MS Word file to an MS Excel file, but the form is essentially the same. Our Financial Director, **Joe Sieczkowski**, will convert the XLSX file to a Google spreadsheet so the competition directors can more easily share information. Check the website for more information regarding this newer method for registering your students.

As a former board member, I have been involved in IDEA for many years, and helped judge the state competition at ISU. Dr. Ryan Brown, now retired from ISU, will continue his role as the primary "problem" guy, and will assist coordination of the state competition. Richard Johansen, retired IDEA member, continues to develop architectural problems for the competition. We are looking forward to working with you to make this event a positive experience for you and your students.

Thanks again for making all of the drafting/design competitions a continued success each year!

Sincerely,

Randy Jacobs, Competition Director - Heartland Community College
Office: 309-268-8872 Cell: 309-530-5483 Email: randall.jacobs@heartland.edu

cc: Ryan Brown, Assistant Competition Director - Illinois State University
Cell: 309-825-2147 Email: rkbrown@ilstu.edu

Regional Awards Distribution Chart

(Effective for 2015 Competitions)

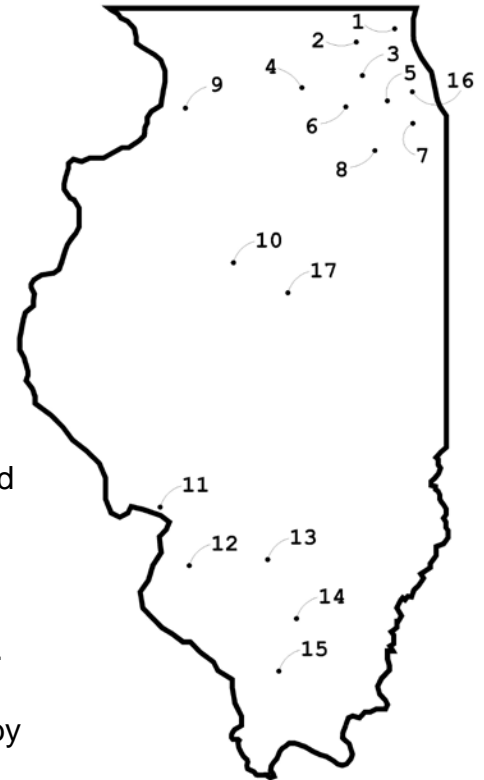
# of Entrants/Division	First Place	Second Place	Third Place
0-10	1	1	0
11-15	1	1	1
16-20	1	1	2
21-25	1	2	2
26-30	2	2	2
31-35	2	2	3
36-40	2	3	3
41-45	3	3	3
46-50	3	3	4
51-55	3	4	4
56-60	4	4	4
61-65	4	4	5
66-70	4	5	5
71-75	5	5	5
76-80	5	5	6
81-85	5	6	6
86-90	6	6	6

Reminder: Only 1st & 2nd place winners qualify for the state competition



IDEA

Drafting & Design Competition Regional Sites 2015



Visit www.idea-online.org for registration rules, forms, sample problems from the past, and more!

If your school resides with a community college district represented by an IDEA regional site, you must select that site. If you are not sure of the site number for your school, you should contact the State Competition Director for advice. You may also contact regional directors of nearby competition sites for more information.

For 2015, registration and fees should be **postmarked** and **paid** by

February 7, 2015.

- | | | |
|---|---|--|
| 1. College of Lake County
Tina Ye
eng524@clcollinois.edu
(847) 543-2625 | 7. Moraine Valley Community College
Charles Bales
bales@morainevalley.edu
(708) 974-5401 | 13. Kaskaskia College
Richard Rittenhouse
RRittenhouse@kaskaskia.edu
(618) 545-3000 x3356 |
| 2. McHenry County College
Bob Mihelich
bmihelich@mchenry.edu
(815) 455-8719 | 8. Joliet Community College
Scott Boudreau
sboudrea@jcc.edu
(815) 280-2410 | 14. Rend Lake College
Kevin Weston
westonk@rlc.edu
(618) 437-5321 x348 |
| 3. Elgin Community College
Jesse Bader
jbader@elgin.edu
(847) 214-7599 | 9. Morrison Institute of Technology
Janice Drosopoulos
jdrosopoulos@morrisonstech.edu
(815) 772-7218 x32 | 15. John A. Logan College
Ron Parks
ronparks@jalc.edu
(618) 985-3741 |
| 4. Kishwaukee College
Mark Schwendau
schwendau@aol.com
(815) 825-2086 x3480 | 10. Illinois Central College
Kevin Thomas
kthomas@icc.edu
(309) 694-8447 | 16. Triton College
JoBeth Halpin
jobethhalpin@triton.edu
(708) 629-5516 |
| 5. College of Dupage
Jane Ostergaard
osterg@cdnet.cod.edu
(630) 942-2331 | 11. Lewis & Clark Comm. College
Joel Hall
jhall@lc.edu
(618) 468-4920 | 17. Heartland Community College
Use Region 10 in 2015 |
| 6. Waubonsee Community College
Randy Hines
rhines@waubonsee.edu
(630) 466-7900 x2930 | 12. Southwestern Illinois College
Shauna Scribner
shauna.scribner@swic.edu
(618) 235-2700 | |

State Competition Director
Randy Jacobs
Heartland Community College
randall.jacobs@heartland.edu

Asst. Competition Director
Ryan K. Brown
Illinois State University (Retired)
rkbrown@ilstu.edu

Regional Site Individual Registration Form

IDEA Regional Drafting-Design Competition 2015

March 6, 2015

(The following should be filled out by the student at the regional competition site)

Registration No. _____

Student Name: _____

Street Address: _____

City & Zip Code: _____

Email address: _____

Home Telephone: (_____) _____ - _____

Circle Year in School: 9th Grade 10th Grade 11th Grade 12th Grade

Name of High School: _____

Name of Instructor: _____

Contest Division (Check One)

Introductory Board _____

Introductory CAD _____

3D CAD Modeling _____

Assembly Modeling _____

Machine CAD _____

Architectural Board _____

Architectural CAD 2D _____ 3D _____

Please leave this form with the Competition Proctor.