



## 2010 UNIVERSITY **UNDERGRADUATE** RESEARCH COMPETITION

The National Electronic Distributors Association's (NEDA) Education Foundation is pleased to offer an outstanding opportunity for undergraduate students to enhance their learning experience, earn recognition and have their research published. The NEDA Research Competition enables students to learn more about the electronics distribution industry and apply class knowledge and skills. Students must have *junior* standing at the time of proposal submission to be eligible.

### **Topic**

Teams of students will take an everyday electronic device and explore the supply chain and distribution channels needed to bring the product from raw material to finished product and finally to the end user/consumer. The goal is to trace a component part of the product from origin to assembly into the final product and then the final product to the ultimate user/consumer.

The selection of an end item/product by the student team must meet the following guidelines:

- can be purchased at a "big box" retailer
- end product retail cost must be < \$1,000

The component part being investigated must meet the following guidelines:

- be an electronics component
- be a purchased part by the end item assembler
- be manufactured or distributed by a NEDA member company. (Verify at <http://www.nedassoc.org/nedaMembers.php5>)
- NEDA will assist in providing contact information for executives at its member companies once the proposal has been approved.

### **Learning Objectives**

1. Develop an understanding of the electronics distribution industry.
2. Develop analytical skills.
3. Utilize valuable information resources such as Value Line Index, Standard and Poors, Wall Street Journal, and other business periodicals and references.
4. Provide an introduction to the industry and executives that may serve as advisors for the project.

### **Research Competition Recognition**

The winning student team and their university will receive a permanent recognition award and will have possession of a traveling trophy for the year that they win the competition. The research study winners will be announced in the *NEDA Voice* newsletter and on the NEDA Web site. Research may also be published in the

NEDA Education Foundation's academic journal *Review of the Electronic and Industrial Distribution Industries*, a semiannual publication of pertinent industry research.

### **Description of the Research Competition**

The student teams should consist of 3-5 members, plus their faculty sponsor. The team will submit their proposal for participation. Once the proposal is approved, the student team will have seven weeks to complete their research study.

Because this is a fairly involved project, faculty might consider this as a semester project as part of a regular course. Research study submissions will be judged by a review committee consisting of industry executives.

### **Contest Rules**

- Teams are limited to a total of five undergraduate students only.
- Only currently enrolled students are eligible.
- Students must have *junior* standing at the time of proposal submission to be eligible.
- Reports are limited to twenty (20) total pages, including appendices.
- Teams must complete all the work themselves. They may receive only limited guidance and direction from faculty advisors or industry professionals.
- A faculty advisor is expected to distribute and explain contest rules to their student teams, collect the submissions, and submit it by the contest timeline.

### **Research Competition Schedule**

09-24-10	Student Team Proposal Submission
10-01-10	Proposal Approval
10-29-10	Student Research Rough Draft Due
11-12-10	Recommendations Sent to Teams
11-24-10	Final Report Submitted to NEDA
12-11-10	Notification of Winner

***Submit proposals by September 24 – Complete reports by November 24.***

*NEDA is a not-for-profit trade association representing supplier authorized distributors of electronic components and their manufacturer-suppliers. Dedicated to enhancing the authorized distributor-manufacturer relationship, NEDA represents companies involved in the distribution of electronic components, computers and computer peripheral components and test, measurement and control equipment parts.*

# NEDA EDUCATION FOUNDATION

## Team Deliverables

- Submit a complete report saved in PDF format by the due date via email to [dconyers@nedassoc.org](mailto:dconyers@nedassoc.org)
- Report must be double-spaced with a 1" margin.
- Use 12 pt font.
- Number all pages and detail topics in a table of contents.
- Submit a digital photo of team in "jpg" format.
- Faculty sponsor and team member names and contact list in "PDF" format. (please include mailing addresses and email addresses)

## Report Format

**Cover Page:** Project title, school name, faculty sponsor and team members.

**Table of Contents:** Include a listing of each major section and reference tables, along with page numbers of each. You may use an appendix for any lengthy sections if you like.

Include the following sections:

- Overview – provide an introduction of the end item/product and the selected internal component
- Define the end item/produce
- Physical description
- Selected manufacturer/distributor, including markets served and annual global volume
- Define the component being studied
- Physical description and specifications

**Executive Summary:** One page overview containing a brief description of the product and component investigated. Should give the reader a clear synopsis of your work and the highlights of your findings

**Market Analysis:** Define the market for the finished product and component being evaluated

- Select and analyze a manufacturer/assembler of the end item being studied
  - Annual units produced
  - Sales volume of the product and company
  - Number of employees
  - Manufacturing locations
  - Other items of interest determined by the team
- Determine and analyze the top 3 global component suppliers for your selected component
  - Sales volume (total) of the company
  - Type of products produced
  - Percentage of total sales for selected product

- Top/primary business/commercial customers
- Other items of interest determined by the team

- Supply Chain Analysis – describe the supply chain for end item, going back upstream from the "big box" retailer to your component's manufacturer. For each business/company involved, determine:
  - Geographical breakdown of markets served
  - Distribution channels and networks
  - Manufacturing locations
  - Distribution Center locations (include size in terms of square feet, people, dock doors)
  - Transportation methods
  - Technology utilized

**References and Citations:** References should be prepared and cited using the APA (American Psychological Association) guidelines (i.e., Carland & Carland, 1991). There is one deviation for APA style: use *italics* in place of underlines for titles. Double space between references and do not indent in any way.

## **Example:**

Kirsznier, Laurie G., Stephen R. Mandell, (1999). *The Holt Handbook*, fifth edition, Harcourt College Publishers.

List oral conversations as "Personal Communication". Note: citations should be made throughout your report where appropriate.

## Report Specifications

**Report Length:** The *Introduction* section through the *Conclusions and Acknowledgment* section should not exceed 15 pages. These 15 pages should stand alone, i.e., all critical information should appear within the 15 pages. The entire report, including appendices and executive summary, must not exceed 20 pages. The reader should not have to read the appendices unless he/she wishes to obtain more detailed information. You should follow the style of writing used in technical reports, i.e. concise and in third person.

**Due Date:** The final report must be delivered to NEDA by **November 24, 2010**. An emailed PDF file is sufficient.

**Evaluations:** Research will be evaluated by a committee of industry professionals based on the attached rubric.

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PH: 678-393-9990 FAX: 678-393-9998 [www.nedassoc.org](http://www.nedassoc.org)



**UNIVERSITY RESEARCH COMPETITION**

University: \_\_\_\_\_ Faculty Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_ Email: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_

**Team Members Information:**

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**RESEARCH PROPOSAL – Please present a brief synopsis of the proposed study.**

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**Please add additional pages as necessary. Complete and return the proposal to NEDA by September 24<sup>th</sup>, 2010.**

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**RESEARCH STUDY RUBRIC (Provided as a point of reference, this is how the papers will be scored)**

Scoring Criteria: 4 = Excellent; 3 = Acceptable; 2 = Below Average; 1 = Unacceptable

<b>Score</b>	
<b>30%</b>	<b>CLEAR, WELL ORGANIZED, WELL DEVELOPED IDEAS</b>
___ 4 ___ 3 ___ 2 ___ 1	<input type="checkbox"/> Main idea (thesis) is clear, well developed and focused. <input type="checkbox"/> Each paragraph has a clear topic and concluding sentence. <input type="checkbox"/> Topic sentences in body paragraphs clearly relate to main idea (thesis). <input type="checkbox"/> Supporting details are thorough and relevant. <input type="checkbox"/> Introduction, body, conclusion provide logical sequencing of ideas, leading to understandable explanation and conclusion. <input type="checkbox"/> Conflicting evidence is acknowledged and accounted for.
<b>15%</b>	<b>GRAMMAR &amp; MECHANICS</b>
___ 4 ___ 3 ___ 2 ___ 1	<input type="checkbox"/> Title page is in proper form. <input type="checkbox"/> Lead sentence captures the reader's attention. <input type="checkbox"/> Sentences are complete; no fragments. <input type="checkbox"/> Run-on sentences are avoided and commas are used only when necessary. <input type="checkbox"/> There is a variety in sentence length and structure. <input type="checkbox"/> Strong verbs are used; passive voice and "be" verbs are not overused <input type="checkbox"/> No vague, overused, repetitive language is used (a lot, great, very, really, etc .) <input type="checkbox"/> Paper has no typographical, spelling or grammatical errors. <input type="checkbox"/> Met minimum/maximum page requirements <input type="checkbox"/> Subject/verb agreement is consistent.
<b>15%</b>	<b>BIBLIOGRAPHY</b>
___ 4 ___ 3 ___ 2 ___ 1	<input type="checkbox"/> Sources are properly cited in both paper and bibliography <input type="checkbox"/> Error free format and punctuation <input type="checkbox"/> 3 or more sources were used; one source may be an Internet source.
<b>40%</b>	<b>QUALITY OF RESEARCH</b>
___ 4 ___ 3 ___ 2 ___ 1	<input type="checkbox"/> Cited 3 or more sources <input type="checkbox"/> Information is relevant to thesis <input type="checkbox"/> Sufficient information is provided to support all elements of thesis <input type="checkbox"/> Research is in-depth <input type="checkbox"/> New insight is gained via the research provided

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