

# Welcome to the World of Semiconductors and STEM Careers

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*Zuzana Steen, University and Academic Relations Manager*



Who We Are



Our  
Workforce

Workplace  
Experience

Who We Are



Our  
Workforce

Workplace  
Experience

# Micron founded in 1978

Operations Begin in the Basement of a Dental Center



1978

# Global Semiconductor Company



**FY2016 Sales:**  
**\$16B+**  
**Employees:**  
**~30,000**



Utah



Virginia



Idaho



Singapore



California



Taiwan



China



Malaysia



Japan

# Micron Technology Virginia (MTV)



- Joined Micron family in 2002
- ~1400 team members
- Micron investment \$3.5B
- Memory: DRAM, NAND & NOR Fabrication
- 180,000 square ft cleanroom

# The New Economy in Virginia

## Richmond Times-Dispatch

RICHMOND, VIRGINIA

VIRGINIA'S NEWS LEADER  
A MEDIA GENERAL NEWSPAPER

SATURDAY, MARCH 25, 2006

FINAL

[www.TimesDispatch.com](http://www.TimesDispatch.com)

VIRGINIA'S CHANGING ECONOMIC LANDSCAPE

### From Marlboros ... to microchips



1997 exports

Computer chips

Cigarettes

Computer memory chips have supplanted cigarettes as state's No. 1 manufactured export

BY JEFFREY KELLEY  
AND JOHN REID BLACKWELL  
TIMES-DISPATCH STAFF WRITERS

morph into a variety of consumer electronics products such as portable music players

Chips ...



## Richmond Times-Dispatch

RICHMOND, VIRGINIA

VIRGINIA'S NEWS LEADER

FRIDAY, FEBRUARY 9, 2007

KING COAL NO MORE

### Va. exports in the chips

Virginia's top exports

State's high-tech firms zoom past coal, cigarettes to become No. 1 in sales beyond our shores

# Micron Memory Enables the Digital Interconnected World



# Whatever You Drive – Micron is Inside



Who We Are



Our  
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# Most common technical positions include:

## Manufacturing Technicians

- HS diploma and some college
- (minimum: intro college Algebra, English Reading and Writing or MT1 Certification)

## Technicians

- 2-year degree, industry certification or equivalent
- (i.e. Electronics, Mechatronics, Automotive Technology)

## Engineers

- 4-year degree or equivalent
- (i.e. Electrical, Chemical, Mechanical, Material Science, Computer Science, Big Data)

**Other careers are in IT, Accounting, Purchasing, HR, ERT, Security, etc.**

# Engineering and Technician Co-ops and Internships

- **Engineering Co-ops – 6-9 months**
  - For Juniors-Seniors of Engineering Schools
  - Electrical \* Chemical \* IE \* Material Science \* Computer Science \* Big Data
- **Engineering Summer Internships – 3 months**
  - For Juniors and Seniors of Engineering Schools
- **Technician Internships/Co-ops – 9-12 months**
  - For HS graduates enrolled at a community college or technical school
  - Pursuing a relevant industry certification or A.S. /A.A.S. degree

All coops/internships are paid at FTE entry level  
and come with full benefits and 5% 401K.

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# K-12 Partners in Virginia

Prince William  
County  
Schools

Manassas City  
Public  
Schools

Manassas  
Park City  
Schools

Academies in  
Fairfax  
County Public  
Schools

## Partnerships include

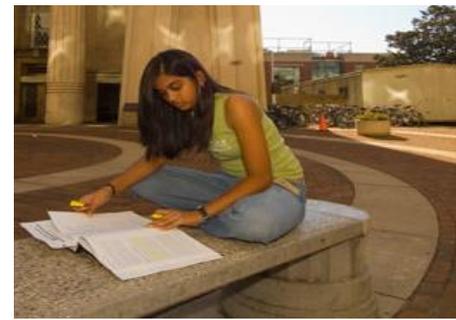
- ◆ Serving on CTE Advisory Boards
- ◆ Tours of Micron and career conversations
- ◆ Participating in Career Fairs and STEM expos
- ◆ Mentoring and Volunteering with Robotics
- ◆ Offering STEM, CTE Scholarships for HS Seniors
- ◆ Funding of STEM programs and Dual Enrollment

# Higher Education Partners in Virginia



## UNIVERSITY of VIRGINIA

- CGEP
- VMEC
- R&D
- Professorships
- VISTA
- Eng. School Advisory Council
- Research Projects
- Internships/Co-ops
- ViNC
- Produced in Virginia
- Guest presenters at eng. classes
- Tours of Micron



## VCU

- CGEP
- VMEC
- Professorships
- VISTA
- ECE Advisory Board
- Internships/Co-ops
- Guest presenters
- Support of Cleanroom
- Internships/Co-ops
- Tours of Micron



## GEORGE MASON UNIVERSITY

- CGEP
- VMEC
- E-manufacturing
- Internships/Co-Ops
- VISTA
- Research projects
- Aspiring Scientists and other STEM programs
- Guest presenters
- Tours of Micron
- ECE and Advisory Boards
- SciTech Campus Advisory Board



## 1872 Virginia Tech

- CGEP
- VMEC
- VISTA
- Semiconductor Lab
- Support of Cleanroom
- Internships/Co-ops
- Professorships
- Scholarships
- Guest presenters
- Tours of Micron
- ECE Advisory Board



## Old Dominion UNIVERSITY

- CGEP
- VMEC
- VISTA
- ViNC
- Internships/Co-ops
- Guest presenters at eng. Classes
- Tours of Micron



## NOVA Northern Virginia Community College

- Micron-specific training
- Matriculation to engineering schools
- Engineering and Electronics Lab
- SySTEMic Solutions and other STEM programs, incl. Pathway to Baccalaureate, Robotics
- Internships/Co-ops
- VMEC
- Guest presenters and Tours of Micron

# How Can This Apply to You?

- Connect with your local chamber or industry association
- Assess your local employers
  - Do/Can they offer
    - Internships and Job Shadowing?
    - Tours?
    - Career presentations?
  - Invite them to
    - Serve on CTE Advisory Boards
    - Participate in Career Fairs and Expos

