MAT² is a partnership between the Talent Investment Agency, State of Michigan, industry leaders, and colleges to address the need for skilled talent.

"Tomorrow's opportunities cannot be realized with yesterday's skills. It's time to develop the next generation of talent."

GOVERNOR RICK SNYDER
What is MAT²?

= Colleges + Industry + Students

Foundation:
- Partnership Approach
- Common Goals
- Return on Investment

Goals:
- Work & Learn Model
- Education and Training Standards
- Skilled Workforce
Program Overview

**2013**
- 2 Occupations
- 2 Colleges
- 11 Companies
- 31 Students

**2015**
- 4 Occupations
- 6 Colleges
- 46 Companies
- 130+ Students
Combination of electrical, mechanical, and electronic skills used to identify, analyze, and solve systems-based problems. A mechatronics technician must be able to support engineers, modify machines, make minor changes, repair, test, and provide maintenance for related equipment.
All MAT² IT technicians will be able to install, troubleshoot, maintain, and update technologies, and communicate to both internal and external customers. The progression of skills will allow students to move through entry-level positions.
Technical product designers develop new products or modify existing ones. After learning the fundamentals of materials and production methods, students create and use internal and client presentations, 2-D drawings, technical documentation, 3-D models, and computer simulations to demonstrate design goals and make any necessary modifications.
CNC manufacturing technicians set-up, operate and produce high quality products on computer numerically controlled (CNC) machine tools. Program participants will be competent in blueprint reading, gauging and inspection, statistical process control, mathematics, safety, and machine tooling.
### College Availability

<table>
<thead>
<tr>
<th>Mechatronics</th>
<th>Technical Product Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakland Community College</td>
<td>Mott Community College</td>
</tr>
<tr>
<td>Henry Ford College</td>
<td></td>
</tr>
<tr>
<td>Baker College - Cadillac</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td>Computer Numerical Control</td>
</tr>
<tr>
<td>Oakland Community College</td>
<td>Delta College</td>
</tr>
<tr>
<td></td>
<td>Henry Ford College</td>
</tr>
<tr>
<td></td>
<td>Kalamazoo Valley Community College</td>
</tr>
</tbody>
</table>
Participating Employers

American Axle
Avon Automotive
Avon Protection
BBG
Benteler
Borg-Warner-Auburn Hills
Borg-Warner-Cadillac
Borg-Warner-Livonia
Brose
Cadillac Castings
Central Process Engineering
Detroit Diesel
Durr
EMAG
FIAMM
FRIMO
FTE
Flowserve
Heller
Hirotec
Humphrey Products
Inergy Automotive Systems, LLC
Jenoptik
K&S Services
Kalkaska Screw
Kern-Liebers
Klingelnberg America
Kostal
Link Engineering
Magna
New Center Stamping
Pontiac Coil
Proper Group
R&H Machine
Rec Boat Holdings
Rexair
Secure 24
Siemens
Skilled Manufacturing
SL America
State of Michigan – DTMB
Universal Tools and Equipment, Inc.
Volkswagen Group of America
Weil Engineering
Williams International
X-L Machine
### Talent Development WIN/WIN

<table>
<thead>
<tr>
<th><strong>Productivity</strong></th>
<th><strong>Partnership</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Custom Fit:</strong> education tailored to company needs</td>
<td>3-Year Trial: truly know each other before the hiring decision</td>
</tr>
<tr>
<td>Applied Learning: lessons reinforced through immediate real-world application</td>
<td>Commitment &amp; Motivation: based on long-term relationship &amp; investment</td>
</tr>
<tr>
<td>Career Orientation: confirms talent, fit, long-term interest</td>
<td>Academic/Business Integration: instructors &amp; employers communicate &amp; collaborate</td>
</tr>
</tbody>
</table>

### Savings

**Lower Cost:** Educational $ offset by initial wages & minimal recruiting
Talent Development WIN/WIN

Productivity

Students are *employees* ... from day one

- Companies can “*customize*” their employee / student in the workplace (skill sets, attitudes, company culture etc.)
- Core skills are taught from the *first semester*
- Skills are applied and tailored in the workplace
- Curriculum is *industry-driven*
- Work assignments are developed to reinforce classroom learning
Partnership

Companies and employee/students build a synergetic relationship

- Students are paid to work and to learn for three years
- Students mature into valuable, highly-motivated employees with long-term loyalty

MAT² companies and students have a commitment to each other

- After three years of work and school, students have a two-year commitment
- No turnover for a minimum of five years

Industry and academic providers are partners

- Companies receive feedback on classroom performance
Applicant Qualifications

ACT Scores*

Math 21
English 19
Reading 18

Resumes of Academically Qualified Candidates are Provided

*Optional for pre-qualification only. Candidates must take college’s required entrance exam.
School Period – Tuition*

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$10,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>$6,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

Weekly Stipend

$200.00

Work Period – Minimum Hourly Wage

<table>
<thead>
<tr>
<th>Year</th>
<th>Minimum Hourly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$9.00</td>
</tr>
<tr>
<td>Year 2</td>
<td>$10.50</td>
</tr>
<tr>
<td>Year 3</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

If a company hired for a similar position, they could spend as much as $84,000 over a three-year period.

*Tuition Rates: Total investment of $14,000 to $23,000 over a three-year period. Tuition rates vary by college.
Program Costs

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>MAT2 Hire</th>
<th>Outside Hire</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Stipend**</td>
<td>$4,600</td>
<td></td>
</tr>
<tr>
<td>Head-hunting/recruiting cost *</td>
<td>$180</td>
<td>$6,000</td>
</tr>
<tr>
<td>Tuition - three years</td>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td>Year Three Salary (total)</td>
<td>$12,096</td>
<td>$29,000</td>
</tr>
<tr>
<td>Year Two Salary (total)</td>
<td>$10,584</td>
<td>$26,000</td>
</tr>
<tr>
<td>Year One Salary (total)</td>
<td>$6,048</td>
<td>$23,000</td>
</tr>
</tbody>
</table>

Total                                      $53,508.00  $84,000.00
Prospect Profile

- Thinking strategically about the number of employees who will retire within the next five years.
- Has demonstrated a growth trend indicating the need for an increased labor force.
- Has supported internships, tuition reimbursement, co-ops, apprenticeships, and mentorships in the past.
2016: Key Dates

- Employer Commitments Due: **March 1-30**
- Interviews Completed: **April 30**
- Job Offers: **May 15 to June 15**
Contact Information

MAT2 Team:
State of Michigan
Talent Investment Agency

Christopher Knapp, Industry Talent Director
517-241-4399
knappc@michigan.gov

Mary Lynn Noah, Industry Talent Project Manager
517-335-8484
noahm@michigan.gov

Denise Flannery, Program Manager (CNC, TPD)
517-373-4238
flanneryd1@michigan.gov

Valerie Jemerson, Program Manager (Mechatronics)
517-373-1201
jemersonv1@michigan.gov

Tangie Jones, Program Manager (IT)
517-335-1939
jonest33@michigan.gov

Website  www.mitalent.org/mat2
Email:  wda-MAT2@Michigan.gov