We would like to invite you to the **HaUI’s Short-term Course** on:

**BASIC ELECTRIC SYSTEM MAINTENANCE OF CONVENTIONAL MACHINES**

Course Period: 5-9 March 2012  
Course Code: MD-BDMVN-02

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**Why We Organize This Course?**  
Hanoi University of Industry (HaUI) has been improving the educational and training programs based on industry’s needs, with technical assistance from Japan International Cooperation (JICA). HaUI will organize this training course as a part of the HaUI-JICA Project, responding to high demand for machinery maintenance technicians. During the survey in 2010, many enterprises show their demand on machinery maintenance technicians for improvement of productivity by reducing machine’s idling time. We selected the maintenance of conventional machines, because the participants can learn the basic knowledge of machine maintenance and simply repair, which can be applied to the maintenance of various machine tools.

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**Whom The Course Target?**  
The course basically targets junior-level machinery maintenance engineers or technicians in enterprises and instructors of training and educational institutions. In particular, the course would be useful for those who have basic knowledge of mechanical engineering but do not have sufficient knowledge on electric and electronic engineering. We will accept 18 participants for this course.

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**What You Will Gain from the Course?**  
Through the course which is the combination of classroom lecturers and practices in workshops with basic instruments and simulators of electric systems of conventional milling and grinding machines, the participants will learn basic knowledge and skills to prevent the troubles in electrical systems of machine tools.

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**Course Contents: the course consists of the following 7 modules:**

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<tr>
<th>Module</th>
<th>Main Contents</th>
<th>Time Allocation</th>
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</table>
| 1. Electrical Safety                        | • General theory on electrical safety: typical cases of electric accidents and the impacts on human bodies.  
• Electrical safety for conventional machines such as protective grounding  
• Practice: checking grounding resistance and evaluating electrical safety | 4 hours         |
| 2. Electrical Measuremen t                  | • Basic knowledge and skills to use measurement tools such as multi-testers.  
• Measuring electrical quantities  
• Practices: measuring current, resistance, voltage, insulation resistance and phase by multi-testers. | 2 hours         |
| 3. Electrical Instrument                    | • Basic knowledge on electrical instruments such as buttons, control units, intermediate relays, time relays, phase control relays, switches and magnetic starters, automatic switches, fuses, and limit switches.  
• Practice: checking the quality of electrical instruments | 2 hours         |
| 4. Electrical Machines                      | • Basic knowledge on electrical machines such as transformers and AC motors.  
• Practice: checking the quality of electrical motors | 4 hours         |
| 5. Sensors                                  | • Basic knowledge on optic sensors and magnetic sensors.  
• Practice: checking the quality of sensors and measuring signal of sensors | 2 hours         |
| 6. Compressed Air                           | • Basic knowledge on air-compressing systems.  
• Practice: checking the quality of compressed air components | 2 hours         |
| 7. Maintenance and Repair of Electric System of Conventional Machines | • Basic knowledge on electrical circuit diagrams of milling and grinding machines.  
• Basic knowledge on wiring diagrams of milling and grinding machines.  
• Practice: conducting fault-finding, maintenance, and simple repair of main circuits and control circuits of conventional machine tools, utilizing 2 milling machine simulators and 2 grinding machine simulators. | 24 hours        |

**Total Training Time:** 40 hours / 5 days
Pictures of Training Equipment and Planned Practices:

Electric system simulator for milling machine

Electric system simulator for grilling machine

Practice on grinding machine

Some testers

Who are Lecturers? The course will be taught by the following 5 lecturers of HaUI with long teaching experience in the field of electric and electronic engineering.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Mr. Tran Minh Duong</td>
<td>Head of Electric Control Unit, VJC</td>
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<tr>
<td>Mr. Nguyen Duc Khoa</td>
<td>Lecturer, Electric Control Unit, VJC</td>
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<tr>
<td>Mr. Nguyen Van Tung</td>
<td>Lecturer, the Faculty of Electronic Engineering</td>
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<tr>
<td>Mr. Nguyen Tuan Anh</td>
<td>Lecturer, the Faculty of Electronic Engineering</td>
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<tr>
<td>Mr. Nguyen Minh Loi</td>
<td>Head of Electric Practice Unit, the Faculty of Electronic Engineering</td>
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Course Period and Time
From 5\textsuperscript{th} March 2012 to 9\textsuperscript{th} March 2012.
Training time: In the morning: 8:00am - 12:00pm; in the afternoon: 13:00pm - 17:00pm

Training Fee
1,500,000 VND/ person/ course

Training Venue
The Vietnam Japan Center, 1\textsuperscript{st} and 2\textsuperscript{nd} Floor, A7 Building, Hanoi University of Industry
Km13, Road No.32, Minh Khai Commune, Tu Liem District, Ha Noi
* HaUI has a canteen where the participants can have lunch, dinner and the dormitory for those who live far away.

For further details of the course, please contact:
Ms. Nguyen Thi Sen, Secretary, Vietnam Japan Center, Hanoi University of Industry
Tel: 04 3765 5407/408 (Ext: 105) / Fax: 04 3765 5409
Mobile: 0984 983 916
E-mail: nghuongsen1980@yahoo.com.vn
APPLICATION FORM
FOR HAUI’S SHORT-TERM TRAINING COURSES

Dear Sir/Madam,

Please fill in the following information and send us this form by fax, email or post by 29 February, 2012 at the following address:

Attention to: Ms. Nguyen Thi Sen, Secretary, Vietnam Japan Center, Hanoi University of Industry Km13, Road No. 32, Minh Khai Commune, Tu Liem District, Ha Noi
Tel: 04 3765 5407/408 (Ext: 105) / Fax: 04 3765 5409
Mobile: 0984 983 916
Email: nghuongsen1980@yahoo.com.vn

Bank Account Information
Account Name: Hanoi University of Industry
Account Number: 3100201 013188
Name and Branch of Bank: Vietnam Bank for Agriculture and Rural Development, Tu Liem Branch, Ha Noi
Details of payment: Course Fee for MD-BDMVN-02

1. Course Information:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Basic Electric System Maintenance of Conventional Machines</th>
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<tbody>
<tr>
<td>Course Code</td>
<td>MD-BDMVN-02</td>
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<tr>
<td>Duration</td>
<td>from 5 March 2012 to 9 March 2012 (5 days)</td>
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2. Company / Organization’s Contact Information:

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<th>Company / Organization Name</th>
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<tr>
<td>Name of Person in Charge</td>
<td>Position</td>
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<td>Tel / Mobile</td>
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3. Information of Applicants

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<th>Full Name</th>
<th>Gender (F/M)</th>
<th>Age</th>
<th>Department/ Division</th>
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Note: If you have many applicants, please put their names in the order of priority order.

4. Your Expectation for the Course

Please share with us about what you expect your staff to learn in the course:

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5. Does any of the applicants want to stay in HaUI’s dormitory during the course? If so, please fill in the following information.

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<th>Full Name</th>
<th>Check-in Date</th>
<th>Check-out Date</th>
<th># of Nights</th>
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Thank you very much for your application to HaUI’s Short-term Course!
Access to HaUI

Hanoi University of Industry (HaUI) locates in Tu Liem District, the west end of Hanoi and close to the former Ha Tay province.

**For those who come from Hanoi City Center**
- Please take the shortest way to reach Kim Ma St. → Xuan Thuy St. → Ho Tung Mau St. → Cau Dien St. Following these roads leads you to Road No.32.
- After crossing the rail way, it would take about 10 minutes to see HaUI at the right side of road. Or after seeing the Tu Liem Industrial Zone at the left side, you will find HaUI at the right side in about 5 minutes. HaUI is now constructing the 16th story building which you can recognize probably after crossing the rail way soon.
- It would take about 45 minutes by car from the city center and about 30 minutes from Daewoo Hotel. Please note that traffic jams often happen on Road No. 32.

**For those who come from Thang Long Industrial Park, Quang Minh Industrial Zone, and Noi Bai Industrial Zone**
- After crossing the Thang Long Bridge and go along Pham Van Dong St. → Turn right to Ho Tung Mau St. → Cau Dien St. → Road No. 32.
- After crossing the rail way, it would take about 10 minutes to see HaUI at the right side of road. Or after seeing the Tu Liem Industrial Zone at the left side, you will find HaUI at the right side in about 5 minutes. HaUI is now constructing the 16th story building which you can recognize probably after crossing the rail way soon.
- It would take about 45-60 minutes by car from Thang Long Industrial Park. Please note that traffic jams often happen on Road No. 32.

**For those who come from Hai Phong, Hai Duong and Gia Lam District**
- After crossing Chuong Duong bridge, please take the shortest way to reach Kim Ma St. → Xuan Thuy St. → Ho Tung Mau St. → Cau Dien St. Following these roads leads you to Road No.32.
- After crossing the rail way, it would take about 10 minutes to see HaUI at the right side of road. Or after seeing the Tu Liem Industrial Zone at the left side, you will find HaUI at the right side in about 5 minutes. HaUI is now constructing the 16th story building which you can recognize probably after crossing the rail way soon.
- It would take about 180 minutes by car from Hai Phong. Please note that traffic jams often happen on Road No. 32.

**Map Around HaUI**