Briefing on Industrial Attachment (IA) & Industrial Internship Programme (IIP)

presented by

Mr Loh Pui Wah
Director, Career & Attachment Office

4 January 2013
Briefing Objectives

• To understand how important work attachment to your future career and job search.

• To know what is expected from you during your work attachment.

For specific enquiries on attachments, please call or visit
Career & Attachment Office
42 Nanyang Avenue
Student Services Centre, Level 4
Tel : 67905242
Email: cao@ntu.edu.sg
A Story...
Within a span of few months, Xu Le had accomplished several NPIs to the Asia-Pacific Region. One of the key projects he managed was a one-time production transfer of a cigarette product from our supply factory in Singapore to Malaysia, to ease the production capacity of the factory. He successfully completed the transfer in the short period of time given and managed to deliver the customer’s demand. This project was the first NPI in the TaO Pilot, which is a globally standardized Enterprise Resource Planning solution currently launched in Malaysia. Our team benefited from Xu Le’s work as we were able to draw out new processes and improvements from his project. He had a huge challenge for this project as it was a brand new operating model and he showed great leadership skills in managing many different parties from departments across both factories, in order to successfully complete the project. The other projects that he took charge were well coordinated too and it greatly improved our KPI.

Xu Le is an exemplary intern. He has shown dedication to his work, exhibited clear thinking process and analytical skills to overcome the many challenges he faced in the course of his project developments. His leadership and management skills were the key factors to the success of the projects he had undertaken. I have enjoyed working with Xu Le over the last few months and will highly recommend him to any prospective employer or institution. Lastly, I would like to thank him for all that he has done during his attachment.

Yours sincerely,

Sergey Titov
NPI Manager
APSCSC - Service

[Signature]

Paul Greenaway
Head of Service
APSCSC - Service
What employers want?

- Verbal and written communication skills
- Honesty and integrity
- Interpersonal skills
- Teamwork skills
- Strong work ethic
- Motivation and initiative
- Flexibility and adaptability
- Computer skills
- Analytical skills
- Organisational skills

Source: Manpower Group
What have IA/IIP got to do with this?
Employer: “I have many applicants from other universities. Why should I hire you from NTU?”

You: “Let me tell you my work experience and how I can contribute to your organisation.”
How can IA/IIP benefit me careerwise?

✓ Apply engineering/science practices in real life industrial or business environment

✓ Enhance and develop academic, personal and professional competencies – my USP (Unique Selling Proposition)

✓ Create potential career opportunities at the IA/IIP company
Learning and Developing from real world experiences

1. **Apply my knowledge**
   - Analysis, synthesis, interpretation of data/information
   - Application of theoretical engineering/science concept
   - Formulation of action plans & evaluation of results

2. **Lay my career foundation**
   - Developing my skills as a professional engineer/scientist
   - Character – ethics, integrity, attitude
   - Clarity about career goals

3. **Develop my professional competencies**
   - Effective oral & written communication skills
   - Interpersonal relations & working in teams
   - Learning to be street-smart
Why do I have to do well?
Three Reasons Why I Must Do Well in IA/IIP

1. Course requirement:
   - Engineering – worth 10 Aus
   - CBC – worth 12 Aus
   - PAP – worth 10 Aus
   - BS – worth 17 Aus

2. Testimonials – Certificate of Accomplishment, Letter of Commendation

3. From interns to permanent hires
You are NTU’s Ambassador!
Maintain My Highest Professional Code of Conduct

• “I am in the real world, working”

  * Unlike in school, “I cannot do as I please”

  × late for work
  × knock off early especially on Fridays…
  × update FB, message others, play game on smart phones
  × make personal calls using company phone…
  × alter MC… AWOL…
  × disobey lawful instructions…
Dear Sir,

This is in reference to IA student from School of Materials Science & Engineering – (MAT), LEE MEIXUAN MICHELLE, NRIC [obscured] who is attached at Delphi Automotive Systems Singapore Pte Ltd for her 22 weeks internship.

I, as her organization supervisor, would like to provide complements about her performance during internship.

1. I found Michelle to be a diligent and hardworking student, who is able to complete all the tasks at hand on time.

2. She was able to work in a team environment and get her all assignments completed successfully.

3. Michelle was able to utilize her materials science and engineering knowledge to resolve practical and difficult industrial problems.

4. She helped us come out with a standard process on “problem solving” that would definitely help us in the coming time to resolve difficult issues.

5. Distinct characteristics of Michelle: As she was attached to failure analysis lab at Delphi that supports the whole plant consisting of more than 800 people, she was performing just like a Delphi Engineer under high time pressure to come out with practical solutions to address customer issues. As compared to her other cohorts, who might have just handled one project in-depth, Michelle has handled several projects and in-depth.

6. As compared to initial weeks when she joined us, she has shown tremendous improvement in her performance, as of today.

I would like to thank NTU career office and Prof. Gan Chee Lip for providing Michelle as an IA student, who has helped us come out during several difficult issues with innovative and practical solutions that has impacted our problem solving performance positively.

I would be happy to answer further on your queries on future internship issues and the current IA student. Please feel free to contact me at 9066-0965 or 6450-8429.

Thanks,
Dr. Sanjay Kumar Thakur
Staff Engineer
Delphi Automotive Systems Singapore Pte Ltd.
501 Ang Mo Kio Industrial Park 1
Remember...
During my IA/IIP, I shall optimise through...

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<tr>
<th>LEARNING</th>
<th>• Observe, Think, Ask, Find Out, Do</th>
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<tr>
<td>ATTITUDE</td>
<td>• “Can do” spirit, Positive, “Take it as a professional”</td>
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<tr>
<td>IMPRESSION</td>
<td>• Sharp, Articulate, Personality &amp; Self-Confidence</td>
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<td>OPPORTUNITY</td>
<td>• Jobs at IA/IIP company</td>
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<td>• Referrals to other companies</td>
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<td>NETWORK</td>
<td>• Future bosses, colleagues, customers, suppliers, business partners or best buddies</td>
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How am I assessed?
Assessment System for Engineering, CBC and BS – 3 Levels

You will be assessed on:

• Log Book and Oral Interview
  – by NTU tutor
• Work in Organisation
  – by organisation supervisor
    (in conjunction with NTU tutor)
• Final Report
  – by NTU tutor
Assessment of Log Book and Oral Interview

Done on-line by NTU tutor

• Two times at week 10 and week 20

• Assessment criteria:
  – Logbook Keeping
  – Oral Interview

• Compulsory : Logbook

• Optional : Folder, small note book
Assessment of Log Book and Oral Interview

Assessment will be based on ability to:

– Maintain clear, concise & relevant entries in logbook
– Analyse, synthesis & interpret information in workplace
– Apply theoretical engineering/science concepts in workplace
– Evaluate results & formulate appropriate action plans
– Demonstrate understanding of professional ethics & work values
– Demonstrate understanding of company’s business and career field
– Explain technical knowledge learnt
– Provide evidence of written communication (e.g. emails, memo, letter, instruction manual, proposal, specification, technical drawing, etc)
Assessment of Work in Organisation

- Two times at week 10 and week 20
- Forms will be given to your supervisor by your NTU tutor
- Assessment will be based on:
  - Quality of Work Produced
  - Practical Ability, Creativity & Innovation
  - Communication Ability & Logbook
  - Work Standards & Ethics
  - Personal Discipline
  - Initiative & Motivation to Learn
  - Teamwork
  - Attendance
Assessment of Work in Organisation (DPA/51)

**NANYANG TECHNOLOGICAL UNIVERSITY**

INDUSTRIAL ATTACHMENT - ASSESSMENT OF WORK IN ORGANISATION

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<th>NRIC / PASSPORT NO.</th>
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<th>PERIOD OF REPORT</th>
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<tr>
<td>1st</td>
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<td>Jan - Jun IA</td>
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<td>Jul - Dec IA</td>
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<th>GUIDELINE</th>
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<td>The performances of most students should fall in categories III, IV, V and VI. Categories I, II and VII should be used only for truly deserving students.</td>
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<th>PART I:</th>
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<tr>
<td>To be completed by organisation supervisor.</td>
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<td>(Please initial against any amendment made by you)</td>
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<tr>
<th>1 QUALITY OF WORK PRODUCED</th>
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<td>Consider the accuracy with which tasks are performed, appropriate attention to work details, awareness &amp; effectiveness of work done.</td>
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<th>2 PRACTICAL ABILITY, CREATIVITY &amp; INNOVATION</th>
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<td>Consider ability to apply engineering fundamentals acquired and results obtained, take a broader view, use both logic and intuition to define problems and provide innovative solutions, search out and utilise opportunities &amp; methods for new situations.</td>
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<th>3 COMMUNICATION ABILITY &amp; LOGBOOK</th>
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<td>Consider ability to express clearly, coherently and relevancy of data given in logbook.</td>
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<th>4 WORK STANDARDS &amp; ETHICS</th>
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<td>Consider general attitude, willingness to contribute and cooperate, ability to do a good job for his/her own sake, performs in a manner that is both ethical and moral.</td>
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<th>5 PERSONAL DISCIPLINE</th>
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<td>Consider adherence to code of conduct, rules and regulations.</td>
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<th>6 INITIATIVE / MOTIVATION TO LEARN</th>
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<td>Consider ability for learning, job interest, dedication and willingness to extend oneself to complete designated tasks.</td>
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<th>7 TEAMWORK</th>
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<td>Consider ability to work effectively with others and to build and maintain productive working relationships, even in difficult situations.</td>
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<th>8 ATTENDANCE</th>
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<td>Irregular, due to:</td>
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<td>Regular</td>
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Do you recommend the student for IA Book Prize?  ☐ Yes  ☐ No

**REMARKS:**

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APPRAISED BY: Name: ____________________________  Designation: ________  Contact No. ________

Date: ________  Signature: ________

INITIAL: ________  DATE: ________
Assessment of Final Report

Done on-line by NTU tutor

• Clear your final report with your organisation before submitting to tutor
• Submit the report to your NTU tutor by week 20
• Assessment criteria:
  – Presentation
  – Structure & Organisation
  – Introduction & Information Gathering
  – Reflective Description of Industrial Experience
  – Results & Discussions
  – Recommendation & Conclusion
Assessment System for PAP – 3 Levels

You will be assessed on:

• **Work in Organisation**
  – by organisation supervisor
  (in conjunction with NTU tutor)

• **Final Report**
  – by NTU tutor

• **Presentation**
  – by NTU tutor
Assessment of Work in Organisation

• Two times at week 10 and week 20
• Forms will be given to your supervisor by your NTU tutor
• Assessment will be based on:
  – Quality of Work Produced
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  – Teamwork
  – Attendance
Assessment of Final Report

Done on-line by NTU tutor

• Clear your final report with your organisation before submitting to tutor
• Submit the report to your NTU tutor by week 20
• Assessment criteria:
  – Report Presentation
  – Structure & Organisation
  – Information Gathering & Literature Review
  – Reflective Description of Industrial Experience
  – Results & Discussions
  – Conclusion & Recommendation
Assessment of Presentation

• Assessment criteria:
  – Internship Learning Scopes and Achievements
  – Quality of Work Presented
  – Fundamental Understanding
  – Questions and Answers
  – Presentation, Organisation and Materials
  – Clarity, Language Use and Accuracy
JOINT REPORT IS NOT ACCEPTABLE

• Even if two or more are involved in the same programme.

• Each student should submit an individual report with own observations, recommendations and conclusions.

• The technical part of the reports could be similar, e.g. data.
Project Planning – Scope, Timeline, Output [Programme Form (Part II)]

Clarify & confirm Programme Scope, Outputs (Deliverables) and Expectations (Targets)

Establish specific time schedule and deadlines for tasks and activities with Organisation Supervisor

Set personal Learning Objectives
PLEASE TAKE NOTE

• Programme may change due to dynamic nature of work environment and changing demands
  – “Be Prepared for Changes”

• Observe all safety rules and regulations
  – Ask for safety briefing or get a copy of safety rules and regulations

• Ensure adequate insurance coverage
  – Check SAO’s website on Additional Personal Accident Coverage during IA/IIP, e.g. work at construction site, shipyard, etc.
DO NOT DO THE FOLLOWING

• Non-disclosure of any confidential information
  – “Do not SMS, blog, twitter, MSN, email, broadcast in Facebook what cool or S!%@$&? stuff you are doing”

• No negotiation for any increase in allowance
  – “Do not complain to the whole world about the Wah#L?@peanuts$$!! stipends you are getting”
VERY IMPORTANT NOTE

• Disciplinary Procedures
  – COI (Committee of Inquiry) and BOD (Board of Discipline) will hear company complaints about students who committed serious disciplinary cases
  – If you have ANY problems during IA/IIP, please seek help from your IA/IIP Organisation Supervisor, and/or NTU Tutor. If you wish to speak to CAO directly, please contact any of our staff officers.
Your IA/IIP may lead you to a job offer with the company...
All The Best & Enjoy Your IA/IIP!

Thank You