Dear students

ASM Pacific Technology Limited ("ASMPT") (www.asmpacific.com) would like to offer **1-year internship** (from June 2020 to May 2021) opportunities to full-time second year or third year undergraduates in engineering or science discipline.

Please refer to the attached file for the details of responsibilities and requirements.

Interested students, please submit your application with cover letter, resume, certificates and transcripts to Ms Carrie Cheung by email (carriews.cheung@polyu.edu.hk) on/before **11 Mar 2020 (Wed)**.

You are strongly advised to state your top 3 interests at the top of your cover letter / resume.
1. Diagnostic & Testing / Digital Electronic / System Engineering / Motion Platform
2. Dispensing System / Mechanical Design / Motion / Sensor / CE Motor
3. Computer Vision / Optics
4. Electronic Engineering / Control Engineering / Embedded Application Software

Department will nominate maximum 5 students to the company. Selected nominees will be informed by email on/before 20 Mar 2020. The company will then later on arrange selection interview with the nominated students.

Should you have any questions, please contact Ms Carrie Cheung at 3400 3185.

Thank you for your kind attention.

Best regards
Department of Industrial and Systems Engineering

ASM Pacific Technology Limited ("ASMPT")

About Our 1-Year Internship Program

The internship program offers you hands-on experience beyond the classroom with one of the leading semiconductor companies in the world. By participating in this program, you can not only explore exciting opportunities and enjoy social life in a dynamic business environment, but also gain valuable work experiences that differentiate yourself from your peers.

You will be assigned to assist our Technology Development / Product Development professionals in the following exciting enabling technology projects. Apart from that, you will have chances to broaden your horizon by visiting our Innovation Centre and/or manufacturing plant and designing community involvement project. We will also support you to develop new skills by providing training courses and completing your internship project. Supervisors will be here to support and guide you.

We believe this program can enable you to better prepare your future career development and understand your own interest.

1. **Diagnostic & Testing / Digital Electronic / System Engineering / Motion Platform**

Responsibilities:

- Participate in test methodology development, test framework development and support; execute test software development cycle to create scalable and optimized test software; provide expertise in managing, planning, constructing and executing system testing; demonstrate the ability to cope with growing complexity and creativity in design by thinking outside the box to determine the best way to test the system;

- Develop and support digital controller board (including board design, FPGA firmware development, etc), conduct digital controller board test flow and assist in test program development; and

- Participate in software development on Cloud platform or Motion control platform (embedded system).

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Mechatronics / Automation/ Electronics / Electrical Engineering / EEE / Manufacturing Engineering / Industrial Engineering / Software Engineering / Computer Engineering / Computer Science / Information Engineering / Information Technology / Information Systems or relevant disciplines; and

- For Diagnostic & Testing team, it would be an advantage if the candidate possesses knowledge of C# programming and/or Labview in Microsoft Windows platform.

- For System Engineering and Motion Platform team, the candidate should possess good knowledge of C++ and C# programming in Microsoft Windows platform; knowledge of database technologies (e.g. MSSQL, MySQL) and web programming (e.g. PHP and JavaScript).

2. **Dispensing System / Mechanical Design / Motion / Sensor / CE Motor**

Responsibilities:

- Assist in mechanical development, test Jig design preparation, prototype measurement and qualification, data collection as well as analysis;

- Participate in electromagnetic sensor development, MCU programming, electronics circuit development, prototype measurement and qualification, data collection and analysis;

- Conduct motion system construction, tuning and evaluation, electronics circuit development, prototype measurement and qualification as well as web page development and maintenance;

- Support CE motor projects and mechanical test jig development;

- Support optics project and mechanical test jig development (need to go to China Plant once per week);

- Support motor project support, mechanical test jig development and CE motor project support (need to go to China Plant once per week); and

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Mechatronics / Automation / Electronics / Electrical Engineering / Computer Engineering / Applied Physics or relevant disciplines.

3. **Computer Vision / Optics**

Responsibilities:

- Develop image processing algorithms and 3D system, train deep learning models and design convolution neural networks;

- Develop high resolution image sensor and its peripherals and diagnostic hardware systems, and evaluate advanced image processing platforms, imaging and lighting effects;

- Build a Continuous Integration System, develop graphical data analysis tools as well as general-purpose software modules;

- Study diagnostic optical performance, simulate imaging and lighting effects and design precision optics systems;

- Gather user requirements to define system functionality and write well-designed, testable and efficient code; and

- Assist in PCB design, circuit simulation, MCU and FPGA programming, new product testing and debugging.

Requirements:

- Year 2-3 undergraduates from Automation / Information Technology / Information Systems / Computer Engineering / Computer Science / Electronics / Software Engineering / Mathematics or relevant Engineering disciplines; and

- For Software Team, the candidate should process good knowledge of C and C++ programming. It would be an advantage if the candidate processes knowledge of HTML5 / CSS / JavaScript and/or git.

- For Hardware Team, the candidate should be familiar with PCB design and circuit simulation tools; strongly interested in electronic design and strong in analytical and trouble-shooting skills in hardware and firmware issues.

4. Electronic Engineering / Control Engineering / Embedded Application Software

Responsibilities:

- Assist the development of motion / electronics system (power drive and power supplies) involving testing, setup, repairing and measurement; with occasional involvement in firmware and test program development;

- Support control system tool development and maintenance, tuning control parameters, trouble-shooting and problem solving for motion system; and

- Design and deploy software and firmware for real time embedded control applications; provide technical expertise and solution to semiconductor equipment products and field for deployment of real time embedded controllers developed.

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Electronic Engineering / Computer Engineering or relevant disciplines; and

- For Electronic Engineering team, it would be an advantage if the candidate possesses project experience on MCU / FPGA / SoC; project experience on analog or power electronic circuit; knowledge on motor control, analog electronic and switch mode power supplies.

- For Control Engineering team, the candidate should possess knowledge in basic control theory (e.g. PID control, frequency domain system identification, etc); knowledge in Matlab and Simulink; knowledge in machine learning; knowledge in Python coding will be an advantage.

- For Embedded Application Software team, the candidate is good to have knowledge in micro-controller, C/C++/C# programming language and control strategy; knowledge in multi-threading and object-oriented programming is an advantage.

Internship Period: June 2020 – May 2021 (one year's full-time employment)

Upon completion of one year's contract, the intern will receive a contract bonus equivalent to one month's basic salary.

Interested students, please submit your application with cover letter, resume, certificates and transcripts to your Department.

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Your preference will be taken into consideration; however, final assignments will be based on your qualification, competence and vacancy.
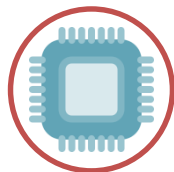
ASM

ASM Pacific Technology Limited ("ASMPT") (HKG: 0522), as a global technology and market leader, develops and provides leading edge solutions and materials for semiconductor assembly and packaging industries, as well as surface mount technology solutions in a wide range of end-user markets including electronics, mobile communications, automotive, industrial, LED and solar energy.

As one of the key R&D centres of ASMPT, ASM Technology Hong Kong Limited constantly inspires, and nurtures high potential talents from all background to pursue breakthroughs in manufacturing technology as well as to realize their ambitions. We always welcome talents who share our vision "**Enabling the Digital World**".

This year we have **10+ internship vacancies** which our interns can explore different enabling technology projects.
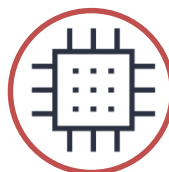
Diagnostic & Testing / Digital Electronic / System Engineering / Motion Platform

Dispensing System / Mechanical Design / Motion / Sensor / CE Motor

Computer Vision / Optics

Electronic Engineering / Control Engineering / Embedded Application Software

We welcome Year 2&3 undergraduates from Engineering and Science discipline

Including: Applied Physics / Automation / Computer Engineering / Computer Science / Electrical Engineering / Electronic Engineering / EEE / Industrial Engineering / Information Engineering / Information Systems / Information Technology / Manufacturing Engineering / Mathematics / Mechanical Engineering / Mechatronics / Software Engineering or relevant disciplines.

Interested parties, please check the detailed requirements of our Internship.

JOIN US

ASM HK Internship Program

By participating in this program, **YOU can**
- **E**xplore exciting opportunities
- **S**ocialize and connect with professionals
- **G**ain valuable work experiences that differentiate yourself from your peers

Program Includes :

Visit of Innovation Centre / Manufacturing Facilities

Internship Project

Feedback Session

In-house Training Programs

Community Involvement Project

You will take part in the exciting enabling technology projects. We believe this program can enable you to better prepare your future career development and understand your own interest.

To know more the work-life as an Intern, please visit our LinkedIn or Instagram.