

## What industry wants/needs from its graduate and PhD recruits?

How to support students moving to industry? What to train them for? What R&D departments expect of their incoming employees?

Industry, more so if they have an R&D department, recruit many technically qualified graduates and postgraduates every year. What skills do they expect them to have? What graduates may be expected to do when working for a business?

“Provide the highest possible value to a business”

How?

Depends on the business. This is Dr van Hemert opinion on what he looks for in recruits, in order of importance:

- Have a good grasp intellectual property (IP), most important at PhD – MSc level, important at a basic level for graduates – types of IP, law, processes, regions, how to read a patent, dependent and independent claims, continuation and divisional patents, infringement and freedom to operate, how to obtain a patent, value of IP. What can be said to a competitor or client, NDAs. Optos has (expensive) workshops with a patent attorney for new recruits.
- Communicate clearly – perform the basics with documents and emails (format, clarity in the message, review docs), understand the goals of your communication, understand your audience, good writing and proofreading.
- Plan and manage a project – create a project plan (not just a Gantt chart), budget, access to resources, characterise and manage risks, mitigation plans, plan for contingencies, understand basics of contracts (NDA, collaboration agreements, IP), understand time and deadlines, report progress. What do you think is going to happen to accomplish your goal? What can be planned for when things don't happen as expected? How do you write a proposal for your project?
- Work with people – supervise and perform line management duties, undertake recruitment, management conflict, manage team dynamics
- Drive a business – understand basics of business finance, basics of market value, able to start or spin out a business (in the UK, in other country), able to run and grow a business
- Exhibit engineer skills – more or less important depending on the company – systems engineering, requirements capture and management, quality and ISO standards, scaling up and design for manufacture, product management, statistics for engineers
- Know how to get a job, write a good CV and cover letter (story better than lists), how to get an interview, how to conduct in an interview, understand recruitment processes in a particular business

Dr Jano van Hemert (Optos)  
UofG workshop Wolfson Medical School  
May 23rd 2017



[www.vanhemert.co.uk](http://www.vanhemert.co.uk)

very valuable is

- Experience from internships
- Soft skill training in graduate and postgraduate courses & workshops
- Relate you PhD skills to industry needs