

The Good Careers Guide

Review of Higher Apprenticeships in Software Engineering



**Good Careers Guide Reviews...
Seeing things differently**

Part One

Mini Review of: Capgemini Higher Apprenticeship in Software Engineering

Capgemini - '*Consulting, technology, outsourcing*'

Star quality

'In terms of technical ability qualified HAs are as good as graduates'

Many software engineering higher apprentices (HAs) will be working on multi-million pound accounts within three months of joining the company.

'After five years we will be at such an advantage – five years' experience and a degree'

What the higher apprentices do

Capgemini software engineers work for project teams that design and develop solutions for IT based problems for companies such as Rolls-Royce or major fashion retailers.

Some HAs we met had been testing sections of code others were working on design documentation. Consulting on technology projects can mean living out of a suitcase and moving every few weeks, though HR director said: 'In the main HAs are on larger, longer term projects, where they can enrich their learning.'

Who a Capgemini HA in software engineering suits

'This route isn't for people who want a nine-to-five job.'

Head of GAP (graduate, apprentice and placement) recruitment at Capgemini said she was keen on determined, articulate youngsters with 'a problem-solving, logical approach' – the type who have done D of E, sport or volunteering activities at school and can show commitment and the ability to multi-task.

Typically aged between 18 and 25, some HAs have worked elsewhere or tried university, others apply straight from school. The recruitment team and apprentices emphasise that the unique combination of work and study means apprenticeships aren't an easy option so perhaps it's not surprising that we were bowled over by the zest, character and resolve of those we met.

Training at Capgemini

A highlight is sharing in the 'fun budget', an assortment of rewards and treats for work well done including cinema tickets and pizza vouchers.

Higher apprentices spend the first 12 weeks at Capgemini working, training and getting project ready. They live in university halls with fellow HAs and spend their days in classes at Capgemini's Telford base. Once initial training is complete HAs leave halls and are assigned to client sites with hotel living potentially becoming the norm.

The Good Careers Guide

Why employ apprentices?

'We want our apprentices to succeed - it's a serious investment for us and a big commitment for them.'

Increasingly Capgemini Project managers like having apprentices on their teams. They get a kick out of helping HAs learn and seeing them blossom. Equally, apprentices inspire colleagues with their enthusiasm, energy and fresh perspectives.

Applying to Capgemini

'If we get a CV that says "I spend most of my evenings coding," we think kerching.'



'At Capgemini we look for outgoing people who have a little bit about them, are naturally inquisitive and want to understand how something works. They might have built a website, fixed computers for others or be the ones that friends turn to for help with apps.'

Why not apply?

A Capgemini higher apprentice in Software Engineering is only really suited to those with a passion for IT who are unfazed by the prospect of living away from home, leaving friends and family behind and who don't mind changing their home base to suit company needs.

Part Two

Full review of Capgemini Higher Apprenticeship in Software Engineering

Unique touch

'Higher apprentices spend 12 weeks working at Capgemini while living in university halls, sharing in the 'fun budget' and making friends with fellow colleagues fast.'

Summary

'We are looking to grow our own people and develop them.'

For the right person – smart, focused, hard-working budding professionals with a passion for IT – a Capgemini HA not only offers unique experiences of work but provides a pathway to a first-class professional career in a dynamic, fast-changing, nurturing company.

HAs sign on for six years and there may be penalties for anyone who jumps ship early. HR director adds: 'We want our apprentices to succeed – it's a serious investment for us and a big commitment for them.'

Following successful completion of the higher apprenticeship element, they read for one of two degrees, either software engineering which develops students' technical abilities and understanding, or business information systems, which focuses on business information management. Good performers who make valued contributions to projects may find themselves on the promotion path well before training finishes.

HAs spend much of their life at the headquarters and offices of other companies and know they can not only work closely with colleagues but, if called for, live with them too.

Monday through Friday hotel living is a typical life-style...

...This requires a certain maturity, hard work and independence of mind and spirit and so is only really suited to those unfazed by the prospect of changing home base to suit company needs. Anyone who is concerned about uprooting and leaving family and friends behind or has regular commitments to sports, music or social activities should think twice before applying.

Why an apprenticeship at Capgemini?

'After five years we will be at such an advantage – five years' experience **and** a degree,'

The Capgemini apprentices we spoke to had all been attracted to apprenticeships by the notion of earning while they learned, not stacking up any debt and gaining invaluable experience by learning on the job. Not that life is hurdle free. Some said they got fed up with their parents, schools and careers advisers constantly talking about 'university, university, university' and bemoaned the fact that many people wrongly assume that apprenticeships are confined to jobs such as hairdressing and car maintenance.

Many would like apprentices to be better understood and given the kudos they deserve.

The Good Careers Guide

What exactly do Capgemini apprentices do?

Train, work, learn, earn, consult

After initial training Capgemini software engineering HAs work as consultants on projects for a variety of companies such as Unilever and HMRC in locations ranging from Cornwall to Glasgow via Cardiff and Kensington.

Software engineers design, develop and maintain companies' software architecture. Day to day, this can include coding, integrating, implementing, installing or changing frameworks and technical and functional application management. Coding plays a significant part but as a tool. Key skills are an ability to problem solve, to work creatively and as part of a team.



Apprentices must be prepared to travel. 'After the first 12 weeks they could be sent anywhere and hotel living can become the norm,' said the company's head of talent. She wasn't joking. The apprentices we met had worked all over – from Knightsbridge to Skelmersdale. Projects can last for anything from a few weeks to a couple of years. 'In the main we prefer them to be on a large project, where they can enrich their learning,' said the apprenticeships HR director, adding that project managers like having apprentices on their teams. 'They get a kick out of helping them learn and seeing them blossom.' Even so, the novelty of living out of a suitcase, no matter how generous the expenses, quickly wears off. 'It's especially hard for anyone with family or personal commitments,' we were told that you can't even guarantee to be completely free at weekends.

Project managers often say the youngsters have a 'fresh way of looking at things' and request to have them back on projects. One boy, we were told, was already known as being 'a really safe pair of hands.'

Training

'We're learning the real world rather than the academic world'

Training begins with an induction week, at Capgemini's slick, modern Telford offices on a business park, ten minutes' walk from the station and town centre. This is followed by three months learning technical software engineering skills in Telford. After that HAs join project teams and can expect to be sent anywhere in the UK.

Each of the three intakes, February, July and September, kick-start their careers with a 12-week accelerated learning environment (ALE) course. Affectionately known as 'boot camp,' the aim is to get the apprentices 'project ready' – crucial, considering many of them will be working on multi-million pound accounts within three months of joining the company. The company's head of talent said: 'They have to realise that they have a responsibility to act as professionals,' Another member of the team added: 'Our reputation is at stake. Every employee represents our brand. We can't afford to take a chance.'

Travel and food expenses are covered during the first 12 weeks and apprentices stay in a hall of residence at the University of Wolverhampton's Telford campus (apart from those from Telford, who live at home). Bright, modern rooms with double bed, desk, wardrobe, TV and en-suite shower. Breakfast and supper provided – much better than typical student fare and eaten at tables laid with linen tablecloths, napkins and even fresh flowers. Telford, a modern town, won't win any glamour awards but it has cinemas, ten-pin bowling and a shopping centre. A taxi ferries the apprentices from the campus to Capgemini every morning and they work from 9am till 4pm, with half an hour off for lunch (sandwiches, chocolate, fruit, juice and endless tea and coffee provided). More often than not, we were told, they spend the evenings in the communal kitchens on campus pouring over assignments on their laptops.

HAs commented: 'We were all nervous at first but we hang out together and eat together and it's very easy to make friends.' Adding, 'It's hard work – there's no getting round it. We get back in the evening and some evenings we have to do at least two hours of work.'

Induction week includes a one and a half day team-building course and activities like skating and quiz nights. The newbies were boot camp fans, saying, 'Bootcamp helps to break the ice and bring everyone closer together' adding 'There is healthy competition in class but we all have a common goal.' As well as IT training they learn 'soft skills,' such as how to write a business email, leave a voicemail and talk on the phone.

After 'Boot Camp' HAs join project teams and can expect to be sent anywhere in the UK. They do real work from day one in a variety of roles – from business analyst to software engineer – but also take a series of two-day training workshops and webinars spread across the next 15 months. Throughout this period and beyond, there are plenty of people to help them learn on the job, support them and help sort out issues, regardless of how small, large or pressing.

While most of the apprentices were buzzing with enthusiasm they admitted that the programme isn't for the faint-hearted. 'The workload can be overwhelming at times –but we are all here because we want to achieve, we want to succeed and we want to strive,' said one.

The operations director said: 'They start working as junior software engineers and we find that they quickly become very productive members of the team,' their enthusiasm, innovation and energy is infectious.'

After two years the higher apprenticeship is complete. They then progress to studying for a BSc in computing and IT. Capgemini originally offered the degree through the Open University but has now teamed up with Aston University. Aston is the first UK university to recognise a higher apprenticeship as the equivalent of a first year at university and adjust the degree structure accordingly. Professor Dame Julia King, Aston University's vice chancellor, has described the degree as 'a major national initiative.' It means that Capgemini undergraduates go straight into the second year of their degree. As they study by distance learning the degree takes three years to complete.

The Good Careers Guide

Life beyond the apprenticeship

Ninety per cent of HAs stay at the company after gaining their Higher Apprenticeship.

The degree element while not compulsory is very strongly recommended and encouraged. A current HA told us that he was excited to think that in years to come he will probably be doing a job 'that hasn't even be invented yet.' This was echoed by an HA mentor who explained that the company's aim is that the HAs of today will be the leaders of the future. 'I'm not interested if they are going to be plodders,' he added. He also remarked that while some apprentices started their careers 'dazzled by the headlights,' by the end of their training they were confident, highly trained individuals who could work in a raft of different roles within the company.

We heard of one apprentice who'd been promoted two grades within 18 months, another who was mentoring two HAs and a third who was a software developer lead for apprentices.

Even the newest HAs we spoke to were up to speed on the progression route – from T1 (the level they're on when they join) to T9 (director level) – and pay grades. As their career progresses there are opportunities, but no compulsion, to work abroad. HAs don't tend to work on international projects during their first two years, though some are currently working in Saudi Arabia



Who signs on the dotted line and stays the course?

Retention rates – around 87 percent complete their HAs.

HAs we met were typically aged between 18 and 24. Some joined Capgemini straight out of school or college, others had worked for a while or gone to university and realised it wasn't for them (the company will consider university students up until the end of their second year). Approximately a quarter of Capgemini HAs are girls – the company admits it wants more girls to apply.

Around two-thirds of the first cohort made it through to the end and completed their HA programmes but this now stands at a commendable 87 percent. 'Our drop-out rates compare favourably with university and are declining as we better understand who to recruit and how to look after and manage those who join us,' says the company.

Capgemini believes in celebrating success and proud parents looked on as UK executive chairman Christine Hodgson presented the 22-strong group with their certificates at a ceremony in London. The handful who didn't make it through to the end left because they didn't understand what the job would be like, hadn't got their head around the 'mobile lifestyle' or because their parents had talked them into doing the apprenticeship in the first place. One left to do teacher training, another to become an actor.

The Good Careers Guide

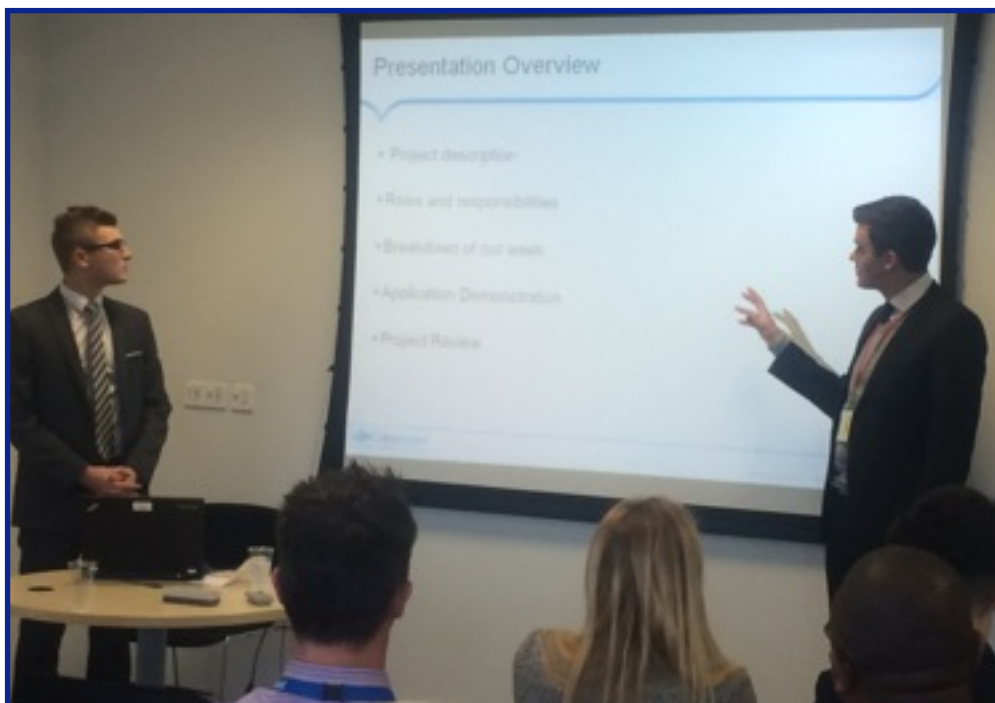
Pay, perks and play

Those who do well can rapidly progress beyond basic pay rates.

Capgemini HAs start on £10,000, with initial accommodation and weekly food costs met by the company. Salaries rise to £16,000 once the initial three-month training is complete. A new apprentice said he'd taken a pay cut to join the programme but added: 'I know that one step backwards is definitely two steps forward.'

Perks include hotels and meals while they are working away, discounted gym membership and travel costs paid for three trips home a year.

Higher apprentice or graduate?



In software engineering, there's a 50:50 split between apprentices and graduates – 'but there's no level of hierarchy between them,' says the head of talent adding, 'One of the major reasons for launching the higher apprenticeship was because we realised the graduate market couldn't achieve the volume of computer science graduates that we needed.'

When we quizzed a group of graduates who joined Capgemini after university for their views they agreed there isn't much difference between graduates and HAs technically, but said the apprentices are sometimes quieter in meetings.

Around half the graduates said they would have considered doing the HA programme themselves if they'd known about it but others liked the university lifestyle, welcomed the extra time to decide about their careers and thought university had made them more adaptable. Asked the same question an apprentice admitted it had been hard 'watching all my mates go to university.' After a while, however, he decided that 'working in a job helps to prepare you better for a job in IT.' Others observed that the novelty of university soon faded and anyway, they had the money to go and visit university friends around the country. They felt they hadn't missed out at all.

'An HA mentor said the only difference between HAs and graduates was that the graduates have 'a bit more life experience.'

The Good Careers Guide

Apprenticeship insights

'It's good because we all have different areas of knowledge and strengths so we help each other out and learn from each other.'

Many were attracted by the fact that while their peers at university are paying fees of £9,000 a year, they are earning a salary and aren't incurring any debt. An HA said he hoped to save enough money for a deposit on a flat by the time he'd finished his apprenticeship. The apprentices recognise they have to be exceptionally committed. 'After all, graduates have the luxury of freedom to learn, study and play without the added extra of a full-on day job,' said a member of the recruitment team. A 21-year-old who had studied accounting at university said he learned more in four weeks at Capgemini than in two years at university.

We met a group of 13 apprentices aged 18 to 25 on week four of boot camp, all kitted out in business suits – boys in ties, the solitary girl in smart shirt and trousers (while girls are in the minority there's usually more than one). All were working on a QA trainer-led flow-chart session, whiteboard and marker pens to the fore. You could be forgiven for thinking you'd dropped in on an A level lesson rather than a high-tech company. Apprentices were engaged and quick to ask questions – some had clearly covered the work and much more before but when quizzed said that tended to happen during initial stages.

Several had previously tried university but decided it wasn't right for them, others had applied straight after A levels and a handful had worked (including a keen breakdancer who'd worked in retail and set up his own not-for-profit organisation). An 18-year-old who'd just booked himself a holiday in Mexico was struck by the fact that a friend who'd gone to university was so broke he couldn't afford to buy a loaf of bread.

'The company has a culture of nurturing talent and project managers 'get a kick out of helping them to learn and seeing them blossom'

The apprentices all have a buddy, a mentor and project manager. There's also an employer assistance programme run by non Capgemini personnel, offering counselling for employees or anyone they live with who has financial or personal problems. They each have a personal development plan and progress is monitored on a weekly basis. It's drilled into them from the start that they need to become known for their work and grow their own networks.

What parents say

'From my point of view, all I ever wanted for my children was for them to be happy and not to be stuck in jobs they don't enjoy; my child made the right decision in choosing a higher apprenticeship – 100 per cent - he has loved what he is doing from the word go'.

'My child wanted to go into computing or software engineering and was very clear about that. This opportunity came at exactly the right time for him, everyone kept telling him that he needed a degree but instead of having years of debt he is earning and getting fabulous job experiences and a degree'.

'There's no doubt that it's hard work. They often don't finish work until 6.30pm and may then have online lectures or other study to do in the evening'.

'The one thing I find is that other parents don't understand. I will say that my child is a higher apprentice and I feel that there is a bit of a stigma but when I explain about the degree as well as working and earning, they are impressed'.

'I am so proud of him. He is getting a first rate experience'.

'A lot of friends went to university and they all go out a lot and had the university social life. Working away means they can't do that but they get to go out with friends at weekends and I don't think they feel they miss out'.

The Good Careers Guide

Remarks

'We recognise that the effort we put in equates to the end product we get out'

Constantly re-evaluating, this award winning programme continues to shine. Newer initiatives like boot camp are the envy of both older apprentices and graduates. It's been a learning curve for all, but sharpening of pencil rather can complete re-edit.

Recruitment is more focused, the programme has evolved and project teams have a better understanding of the value HAs bring to their teams. While changes have been made, much of what was so great in the first place is still evident.

'Our higher apprenticeship programme has been a massive success,' a senior Capgemini executive told us.

There's no doubt that Capgemini trains its apprentices to an exacting standard, gives them the opportunity to work on major IT projects and supports them through their degrees. The HAs rise to the challenge magnificently. The current and former HAs we met were highly skilled, ambitious, on top of their game and importantly, ably equipped to meet tomorrow's needs today.



Part Three

Applying to Capgemini could it be you?



Is a software engineering higher apprenticeship at Capgemini for you?

'I look for outgoing people who have a little bit about them, are naturally inquisitive and want to understand how something works' HA mentor

If you're a motivated self-starter who likes applying your skills for real and is passionate about IT then this higher apprenticeship could be for you. The head of GAP (graduate, apprentice and placement) recruitment said: We are keen on determined, articulate youngsters with a problem-solving, logical approach; those with a bit of get up and go – the types who have done D of E, sport or volunteering activities at school and can show commitment and the ability to multi-task.'

Apprentices need to be prepared to put in the hours though – inside and outside office hours. Those we met were adamant that this route definitely isn't for people who want a nine-to-five job, a sentiment echoed by the recruitment team who reiterated that - with their unique combination of work and study apprenticeships aren't an easy option.

Other apprentices said that this route might not be suitable for 'people who are afraid to come out of their comfort zone' or 'people who don't like taking risks.' The Apprentice and Undergraduate Programme Manager. said, 'Mind you, it's a risk with a safety net.'

From our perspective we doubt there are fewer more nurturing companies out there. According to the new recruits we met, Capgemini supports young people through training and work, builds their confidence and self esteem and sets great store by its seven shared values of trust, honesty, modesty, fun, boldness, team spirit and integrity. There is a real family feel and community spirit, teamwork and team spirit are very much to the fore – apprentices talk of helping and supporting each other and feel supported by their superiors too.

The Good Careers Guide

What Capgemini looks for - qualifications and qualities

- **Qualifications** – Capgemini HAs need seven GCSEs (or equivalent) at grade C or above, including maths and English, as well as 240 UCAS points (equivalent to CCC or above at A level, with IT, maths or science as one of their subjects). Alternatively, candidates should have the BTEC national diploma (with at least one distinction) or have completed a full IT-related advanced apprenticeship with work experience. The recruitment team admitted that Capgemini ‘sets a high bar in terms of the academic side,’ although one boy we spoke to had got a C in his GCSE maths and said he was coping fine.
- **Passion for IT** - First and foremost Capgemini look for a passion, enthusiasm and capability in software development and IT creativity. ‘If we get a CV that says “I spend most of my evenings coding” we think “kerching,”’ the company’s head of talent told us. ‘Many applicants have a knowledge of PowerPoint and Word but they don’t necessarily know about coding or Java. We look for underlying aptitude and a desire to learn. They might have built a website, fixed computers for others or be the ones that friends turn to for help with apps.’
- **Other essential qualities** - High analytical capability, good oral and written communication, interpersonal skills, self-motivation and the ability to work as part of a team. Try to demonstrate that you have these qualities by giving examples rather than just listing them.

The application process

We want to make sure that even if they don’t get through they get something out of the experience,’ says the company.



- **Online application** - Applicants for the Capgemini HA programme must first complete an online application form. Says the HR team, ‘They can upload their CV too if they wish – the application form is a must, the CV optional.’
- **Telephone interview** - Of those who apply, around 50 per cent make it through to a 20-minute telephone interview, facing questions about why they have chosen the apprenticeship route and why they want to work at Capgemini.
- **Assessment day** - Just under half of those who have a telephone interview are invited to an assessment centre for a half-day session, which includes an interview, group exercise and aptitude tests. Everyone is given feedback, even those who aren’t successful:

The Good Careers Guide

Capgemini - what you should know

Capgemini operates in 44 countries and has more than 130,000 employees

Capgemini is a global provider of consulting, technology and outsourcing services, helping companies and public sector organisations to improve their businesses through 'smart, appropriate use of technology systems.'

The company works with everyone from HMRC to Unilever. Its headquarters are in Paris and it has offices across the UK, including London, Woking, Birmingham, Edinburgh, Glasgow and Swansea.

Capgemini launched its five-year higher apprenticeship (HA) programme in 2011, with a view to tackling the IT skills shortage in the UK and enabling young people to gain a level 4 apprenticeship, role-specific training and a sponsored degree.

The company offers apprenticeships in .NET software engineering, Java software engineering and data and business IT. It hires more than 100 HAs a year (around 2,400 applied in 2013) and gives them the skills they need to succeed in technical roles and add value to client projects from an early stage in their careers.

Capgemini's apprenticeship programme has won a host of awards. The company was highly commended at the 2013 National Apprenticeship Awards, has been named as one of the City & Guilds top 100 apprenticeship employers and is part of the government's Trailblazer campaign to design and implement new industry-backed apprenticeship standards.

How to find out more

Capgemini runs a variety of Insight evenings, work Inspiration events, school events and open days.

Current apprentices found out about the programme in a host of ways – including via teachers, googling IT jobs and the National Apprenticeship Service (NAS) website. They recommend looking at the Capgemini website as it has a lot of information about the company and what they do. Coincidentally one apprentice who applied through the NAS's vacancy matching service, which is supported by Capgemini, ended up working on that website.

Other early career opportunities at Capgemini

In addition to graduate entry, advanced apprentice routes and additional higher apprenticeship programmes Capgemini is now in the early stages of developing a cyber security HA,



The Good Careers Guide 2014... *Working with you*