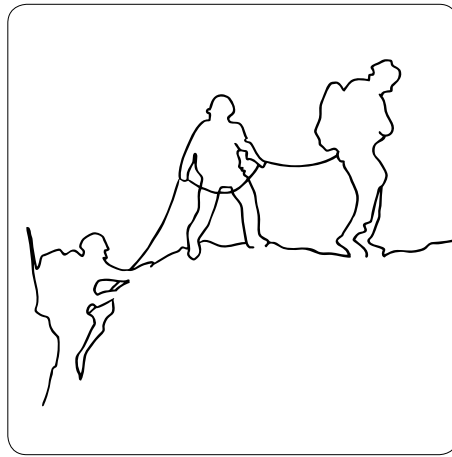


Xebia Craftsmanship Curriculum accelerates three years of professional growth into a single year



Fifteen sharp and focused modules develop the developer

XEBIA CRAFTSMANSHIP CURRICULUM

Business responsiveness and cost of ownership of software are increasingly important. Development teams need to cope with rapid direction changes and provide faster time to market. The quality of the team rests largely on the quality of individual developers. Good developers hone their skills. This needs time for experiments and a source of answers. The Xebia Craftsmanship Curriculum (XCC) offers the needed guidance, while facilitating developers to learn on their own. Young people today learn differently. They are more practical and work in teams on projects. They expect interactive sessions, less slides, more hands-on exercises. XCC is attuned to this new and better way of learning.

The Xebia Craftsmanship Curriculum consists of coached workshops that are driven by the attendees' curiosity. High impact, high relevance, good fun.

The XCC is a modular training, accelerating three years of professional growth into one single year.

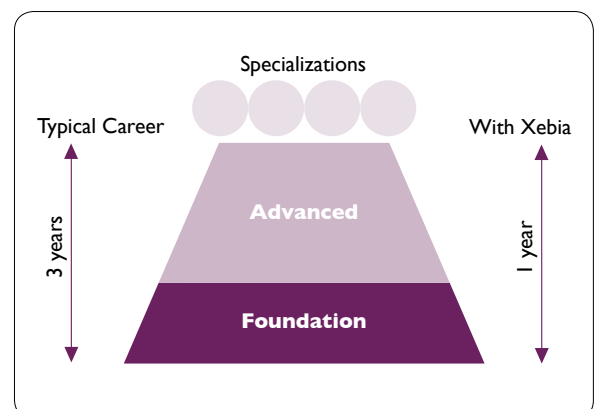
The program results in:

- better application quality
- higher developer effectivity
- faster time to market
- lower cost of ownership
- retention of skilled people

As a result of XCC developers have more up to date skills and are more comfortable learning new things. Fifteen sharp and focused modules spread out over a year develop the developer. Skilled developers raise

software quality, with higher flexibility and faster delivery as a result.

The self-learning ability of developers is increased by our training methods. The developer ends up having a more relevant skill set and the ability to keep it that way.



Earlier effectiveness for developers

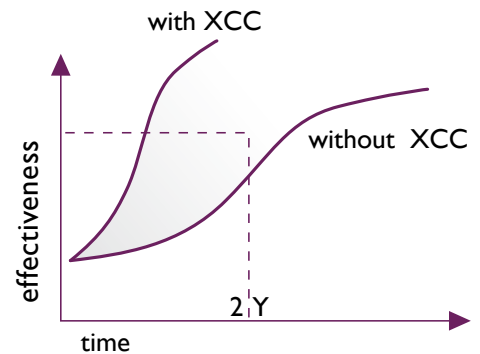
A developer using selflearning and traditional training will take about three years on average to become effective and self sufficient. XCC shortens this cycle to one single year. This means that a developer will show higher productivity earlier.

High quality code

Properly educated developers will write higher quality code. This reduces the cost of changes and the number of production issues. Recent measurements by Microsoft and IBM have shown that using XCC practices, prerelease defect density will be between 2 and 10 times lower. Xebia has even shown that it is possible to deliver working software to production entirely bug-free. Given the fact that a production issue is 10 times more expensive to resolve, this is a great cost saver.

Example ROI

Given that the average increase in productivity in the first three years is 30% per year we can calculate the return on investment for the program.



The first two years will give a gain of 80% under very conservative assumptions. With an average developer salary of € 40.000 this is a gain of € 64.000 per developer over the first two years.

Curriculum Map

Focus	Developer Skills	Collaboration	Application	Testing	Result
Technical Control	Managing Dependencies Test Driven Development	Version Control	Deployment	Continuous Integration	Any problem has a solution
High Quality	Refactoring Modular Design	Pair Programming Reviewing	Security Concurrency Performance Scalability	Automated Acceptance Testing	Problems are easier to solve
Process Control	Estimation	Agile	Metrics	Advanced Continuous Integration	Predictability
High Effectiveness	Technology Exploration	Extreme Programming	Domain Driven Design	Continuous Delivery	Faster response times
	Foundation	Advanced	Specialist		

Better performance through Agile

XCC teaches developers the technical skills that are needed in an Agile environment. Working Agile reduces costs because only software that is needed is built. Agile motivates young developers and helps to continuously improve.

Invest in good developers



CFO
What if we invest in our people and they leave?

CEO
What if we do not invest in them and they stay?



XCC resolves both sides of this problem. It gets the best out of people early and naturally shows what people are made of earlier in their career.

Small and focused modules

Attention spans are shorter. Filters are getting more aggressive. Developers regularly battle a huge information overload. This battle is part of the training. To win the attention of good developers and to get through their crap filter we enforce active learning. Having a short attention span and a good filter are assets to a fast brain. Modules must be short, no more than two days. They are divided into blocks: a quick story, some discussion and an hour of practice. The workshop is an opportunity for the attendees to share valuable knowledge, not an obligation to memorize force-fed information.

Discussions are facilitated by Xebia Essentials flash cards. Putting responsibility in the hands of the attendees and focussing them on bite size problems results in a unique vibe.

Xebia Essentials foster Active Learning

The Xebia Essentials flash cards are the perfect artifact to provoke group discussion during the workshops. They deliberately draw the focus away from the front and center of the classroom and create a local focus in a small group of attendees. The cards have been carefully



selected to build on existing knowledge many developers already have and nudge them in the right direction.

During the workshop the trainers will pull out relevant cards while giving feedback on the work done by the attendees. This habit is easily learned and can be applied by the attendees during normal work.

Active Learning

After having disappointments with traditional classroom training Eric Mazur started experimenting with Peer Instruction. Peer Instruction is a teaching method that focusses on getting students to discuss topics among themselves actively instead of listening to a lecture passively.

Already in the first year he saw significant improvements in exam results. Later research shows that also long term retention is better when using active learning methods. Since then similar developments have overtaken all levels of education. It should be considered a well established fact that active learning methods like Peer Instruction work much better than traditional classroom training.

Curriculum Details

These modules are suggested as the standard program. It is possible to mix and match from the program to tailor to your needs.

Pair Programming	Two day workshop: <ul style="list-style-type: none">• effective pairing• remote pairing	Automated Acceptance Testing	Two day workshop: <ul style="list-style-type: none">• automation tools• acceptance suites
TDD	Two day workshop: <ul style="list-style-type: none">• TDD recipes• getting in the Zone• katas	Modular Design	Two day workshop: <ul style="list-style-type: none">• choosing granularity• integrating builds• separate cycles
Version Control	Two day workshop: <ul style="list-style-type: none">• getting git (can be customized to use Hg, or some another VCS's)• changesets and collaboration• branching, merging, rebasing	Concurrency	Two day workshop: <ul style="list-style-type: none">• java concurrency• threading issues• concurrent tests
Deployment	Two day workshop: <ul style="list-style-type: none">• local deployments• deployment architectures• automatic deployments	Performance	Two day workshop: <ul style="list-style-type: none">• measuring performance• in jvm bottlenecks• architectural bottlenecks
Managing dependencies	Two day workshop: <ul style="list-style-type: none">• Maven, Gradle• writing plugins	Continuous Integration	Two one-day workshops: <ul style="list-style-type: none">• hudson/jenkins• integrating AAT• continuous deployment
Reviewing	One day workshop: <ul style="list-style-type: none">• smart reviewing• finding structure• tooling and feedback	Security	Two day workshop: <ul style="list-style-type: none">• security concepts• security risks• thinking like a hacker• proper security practices
Refactoring	Two day workshop: <ul style="list-style-type: none">• patterns• tool support• safe points	Scalability	One day workshop: <ul style="list-style-type: none">• designing for scale• models that don't scale• models that scale well

Certification

After each module you will receive a certificate of attendance. At the end of the program you will be given the opportunity to go through an aptitude test and become a Xebia Certified Craftsman.

About Xebia

Xebia is an international, IT consulting, project and outsourcing organization. Xebia is committed to a leadership position in its market. The company specializes in Enterprise Java and Mobile technology, and Agile methods. We help customers optimize business value within their IT projects by putting craftsmanship first. A team of more than 250 professionals — all driven by the will to be the best in their field — work to make the Xebia difference. Xebia operates from offices in Hilversum, Paris, Delhi and Boston.

Xebia's mission is striving for the position of authority in our fields of expertise. Xebia's values are People First, Customer Intimacy, Quality without Compromise and Sharing Knowledge. The combination of mission and values gives Xebia a clear direction and guides all decisions that we make. We ourselves see Knowledge Management, our program for sharing knowledge, as the foundation for Xebia's craftsmanship and market position. At Xebia, we share knowledge internally and externally. Internally through mandatory bi-weekly knowledge exchange sessions for all consultants. As well as 2 annual techrally's with international authorities in our fields of expertise. Externally by actively publishing articles, blogging (blog.xebia.com) and speaking at events and (international) conferences (www.xebia.com/events). We invest heavily in training our people and encourage them to contribute to international communities and conferences.

Xebia Education is a leader in Agile and Craftsmanship training. We certified over 200 people as Scrum Master, in co-operation with the international Scrum Alliance, with gurus such as Jeff Sutherland and Sanjiv Augustine. Our Craftsmanship training program consists of over 15 modules touching the essentials of professional software development. (www.xebia.com/training)

For more information, visit www.xebia.com.

