



# **Syllabus - Frontend developer focus on web security**

**Training number: YH00806 - 2022 - 2  
400 YH points**



## **Compulsory courses and course credits**

<b>Self-leadership - leading oneself, foundation</b>	<b>5 Yh points</b>
<b>Frontend development - Client</b>	<b>30 Yh points</b>
<b>Basic JavaScript programming</b>	<b>25 Yh points</b>
<b>Frontend Development - Server</b>	<b>20 Yh points</b>
<b>Secure communication over the internet</b>	<b>30 Yh points</b>
<b>Self-leadership - leading oneself, continued</b>	<b>5 Yh points</b>
<b>Web framework for JavaScript</b>	<b>40 Yh points</b>
<b>Agile project methodology and testing</b>	<b>20 Yh points</b>
<b>Advanced web development with JavaScript</b>	<b>30 Yh points</b>
<b>Packaging, delivery and follow-up</b>	<b>30 Yh points</b>
<b>Web security - analysis and implementation</b>	<b>30 Yh points</b>
<b>LIA 1</b>	<b>60 Yh points</b>
<b>LIA 2</b>	<b>50 Yh points</b>
<b>Master thesis</b>	<b>25 Yh points</b>
 <b>Amount:</b>	 <b>400 Yh points</b>



# Syllabus

## Self-leadership – leading oneself, foundation

**Training and round:** Frontend developer specializing in web security, YH00806 - 2022 - 2

**Scope of the course:** 5 university of applied sciences credits

**Decided by management team:** 2022-06-03

**Version:** 1

**Elective course:** No

**Language:** The course is given in Swedish.

**Prerequisites:** -

### Content and purpose

The purpose of the basic and continuation course is to develop skills and competencies in the student that working life has deemed important to be able to perform well in the upcoming professional role.

The basic course has a focus on developing the ability to motivate oneself and to develop attitudes that lead to maximum development during the course of study and later in working life. This also leads to increased employability after the education. In the continuation course, the student's ability to set and work towards goals is developed and to create behaviors that make the goals easier to reach.

### Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. Methods to motivate oneself 2.

Methods to develop attitudes that increase the student's ability to develop and perform well during studies and later in working life

### Skills 3. Be

able to apply methods to motivate oneself 4. Be able to apply methods to develop attitudes that increase performance

### Competences

5. Independently and confidently able to assess and reflect on different methods in order to be able to motivate oneself and to develop attitudes that increase performance.

### Forms of knowledge control

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.



**Principles for grading The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

**Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

**Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

**Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of the methods and tools included in this course.



# Syllabus - Frontend Development: Client

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *30 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** *-*

## Content and purpose

The course introduces the student to front-end development from both a visual and a logical perspective and where structure, presentation and interaction are in focus. The course contains course literature in English. This course literature develops the students' ability to communicate in English within the professional field.

## Course objectives

After completing the course with an approved result, the student must be able to:

### Skills 1. \_\_\_\_\_

HTML and CSS

2. Creating interaction using JavaScript 3.

Frontend frameworks

4. Cross-browser web development 5.

Responsive design and design patterns 6.

Developing using browser developer consoles

### Skills 7. \_\_\_\_\_

Develop towards browser environment from a visual and logical perspective

8. Measure performance and

debug 9. Manage design patterns and development tools for frontend

development 10. Work towards a version control system, for example Git

### Competences

11. Independently and confidently assess and choose different methods  
for front-end development

## Forms of knowledge control

The student's knowledge, skills and competences are assessed based on the results of the following knowledge checks:

- Course objectives 1-11: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.



**Principles for grading The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

**Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

**Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

**Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of the methods and tools included in this course.

# Syllabus –



# Basic JavaScript programming

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

*Scope of the course: 25 university of applied sciences credits*

**Decided by management team:** 2022-06-03

**Version:** 1

**Elective course:** No

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** -

## Content and purpose

The course provides an understanding of what programming entails, differences between different programming languages, the structure of a program and the mathematics that is relevant to being able to build advanced functionality.

## Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. The difference between different types of programming languages, what they are used for and what role JavaScript plays in the context
2. Syntax for JavaScript
3. Object-oriented programming and being able to explain how different tasks can be solved with object-oriented programming and reason about different solution options
4. General knowledge of libraries and frameworks
5. Code conventions
6. Different tools for web developers

### Skills

7. Apply JavaScript to solve various programming tasks

### Competencies

8. Independently reflect on and evaluate choices made during the development of web applications

## Forms of knowledge control

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-8: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

## Principles for grading

The student's performance is graded after completed course with the grades Not Passed (IG),



**Passed (G) or Well Passed (VG).**

**Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

**Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

**Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to make well-grounded and nuanced applications of the syntax for JavaScript.

## **Course plan - Frontend development Server**

*Training and round:*

*Frontend developer specializing in web security, YH00806 - 2022 - 2 20*

*Scope of the course:*

*university of applied sciences credits*





**Decided by management team: 2022-06-03**

**Version: 1**

**Elective course: No**

**Language: The course is given in Swedish. Course literature in English may include**

**Prerequisites: Basic JavaScript programming**

### **Content and purpose**

The purpose of the course is to teach the student backend development in JavaScript with node.js, or equivalent. The course develops the student's ability to develop server applications.

### **Course objectives**

After completing the course with an approved result, the student must be able to:

#### **Knowledge**

1. Backend development with node.js, or equivalent
2. Create server applications

#### **Skills**

3. Develop towards server and desktop with node.js, or equivalent
4. Structure code in a server application using the REST API

#### **Competencies**

5. Independently assess and evaluate different methods for backend development

### **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

### **Principles for grading**

The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

#### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

#### **Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

#### **Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and reached all of them



course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of them methods and tools included in this course.

# Syllabus –

## Secure communication over the internet

*Training and round:*

*Frontend developer specializing in web security, YH00806 - 2022 - 2*

*Scope of the course:*

*30 university of applied sciences credits*



**Decided by management team: 2022-06-03**

**Version: 1**

**Elective course: No**

**Language: The course is given in Swedish. Course literature in English may occur**

**Prerequisites: -**

### **Content and purpose**

The aim of the course is for the students to learn to develop web applications that can send information over the internet and to have a basic understanding of how secure communication over the internet works and how to create secure communication.

### **Course objectives**

After completing the course with an approved result, the student must be able to:

#### **Knowledge**

1. Methods for creating secure communication over the Internet and between applications 2.

Methods for developing secure web applications that send information over internet

#### **Skills 3. Be**

able to apply different methods to send and receive data 4. Create secure applications that apply secure communication

#### **Competences**

5. Independently choose and apply secure methods for communicating over the internet

### **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment (IG/G/VG) •
- Course objectives 1-5: written test (IG/G/VG)

The course grade is based on a combination of all assessment documents.

### **Principles for grading The student's**

performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

#### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.



### Passed (G)

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

### Well Passed (VG)

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of the methods and tools included in this course.

# Syllabus

## Self-leadership – leading oneself, continued

*Training and round:* Frontend developer specializing in web security, YH00806 - 2022 - 2

*Scope of the course:* 5 university of applied sciences credits

*Decided by management team:* 2022-06-03

*Version:*

1



**Elective course:** No

**Language:** The course is given in Swedish.

**Prerequisites:** -

### **Content and purpose**

The purpose of the basic and continuation course is to develop skills and competences in the student that working life has judged to be important to be able to perform well in the upcoming professional role.

The basic course has a focus on developing the ability to motivate oneself and to develop attitudes that lead to maximum development during the course of study and later in working life.

This also leads to increased employability after the education. In the continuation course, the student's ability to set and work towards goals is developed and to create behaviors that make the goals easier to reach.

### **Course objectives**

After completing the course with an approved result, the student must be able to:

#### **Knowledge**

1. Methods for setting and working towards goals
2. Methods for creating behaviors that increase the ability for self-leadership

#### **Skills 3. Be**

- able to apply methods to set and work towards goals
4. Be able to apply methods to create behaviors that increase the ability for self-leadership

#### **Competences**

5. Independently and confidently able to assess and reflect on different methods for setting and working towards goals and to develop behaviors that increase the ability for self-leadership

### **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

### **Principles for grading**



The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

#### Not Passed (IG)

To receive the grade Not Passed (IG), the student must have completed the course without reaching all of them course objectives.

#### Passed (G)

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

#### Well Passed (VG)

In order to receive the grade Well Passed (VG), the student must have completed the course and reached all of them course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of them methods and tools included in this course.

# Syllabus - Web Framework for JavaScript

*Training and round:* Frontend developer specializing in web security, YH00806 - 2022 - 2

*Scope of the course:* 40 university of applied sciences credits

*Decided by management team:* 2022-06-03

*Version:* 1

*Elective course:* No

*Language:* The course is given in Swedish. Course literature in English may occur



**Prerequisites:** *Basic JavaScript programming*

#### **Content and purpose**

During the course, the student's ability to combine front-end and back-end technologies to build complete web applications is deepened. This is done using frameworks, libraries and design patterns. The course contains course literature in English. This course literature develops the students' ability to communicate in English within the professional field.

#### **Course objectives**

After completing the course with an approved result, the student must be able to:

##### **Skills 1.**

- Architecture patterns, for example Model-View-Controller (MVC)
- 2. Common frameworks, libraries and design patterns

##### **Skills 3.**

- Develop applications using commonly used architectural patterns, frameworks, libraries and design patterns
- 4. Choose frameworks, libraries and design patterns based on type of application

##### **Competencies**

- 5. Independently assess and apply web frameworks in the development of applications

#### **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

#### **Principles for grading The**

student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

##### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

##### **Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.



**Well Passed (VG).**

In order to receive the grade Well Passed (VG), the student must have completed the course and reached all of them course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of them methods and tools included in this course.

## **Syllabus – Agile project methodology and testing**

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *20 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** *-*

**Content and purpose**





In the course, the student learns traditional project methodology and agile project methods, which are most common in development projects. In addition, the student learns how testing can be planned, carried out and followed up.

**Training points:**

- Traditional and agile project methods and under what conditions they work successfully •
- How testing can be planned, carried out and followed up

**Course objectives**

After completing the course with an approved result, the student must be able to:

**Skills 1.**

- Traditional project methods 2.
- Agile project methods 3.
- The testing process
- 4. Test design
- techniques 5. Different
- types of tests 6. Testing in different project methods

**Skills 7. Be**

- able to apply different types of testing methods for development projects
- 8. Apply traditional and agile project methods

**Competences**

- 9. Independently evaluate working methods against different
- conditions 10. Independently assess different test methods against different conditions

**Forms of knowledge assessment**

The student's knowledge, skills and competences are assessed based on the results of the following knowledge

- assessments: 1. Course objectives 1-10: written test (IG/G/VG)
- 2. Course objectives 1-10: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

**Principles for grading The**

student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

**Not Passed (IG)**



To receive the grade Not Passed (IG), the student must have completed the course without reaching all of them course objectives.

**Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

**Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and reached all of them course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of them methods and tools included in this course.

# Syllabus –

## Advanced web development with JavaScript

*Training and round: Frontend developer specializing in web security, YH00806 - 2022 - 2*

*Scope of the course: 30 university of applied sciences credits*

*Decided by management team: 2022-06-03*

*Version: 1*

*Elective course: No*

*Language: The course is given in Swedish. Course literature in English may occur*

*Prerequisites: Basic JavaScript programming*



## **Content and**

**purpose** The course gives students in-depth knowledge of how to use JavaScript for advanced web development. The students also learn web security. The course contains course literature in English. This course literature develops the students' ability to communicate in English within the professional field.

### **Course objectives**

After completing the course with an approved result, the student must be able to:

#### **Knowledge**

1. Methods for developing towards and using the mobile phone's built-in functions and sensors
2. Methods for designing and developing secure applications

#### **Skills 3.**

- Apply different methods for secure web development 4.
- Program against and use the mobile phone's built-in functions and sensors

#### **Competences**

5. Being able to independently assess different methods in order to be able to design and develop safe applications
6. Independently assess and evaluate different methods for designing and developing towards the mobile phone's built-in functions and sensors

## **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-6: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

## **Principles for grading The**

**student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

#### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

#### **Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

#### **Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and reached all of them



**course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of the methods and tools included in this course.**



# Syllabus – Packaging, delivery and follow-up

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *30 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** *-*

## Content and purpose

The course focuses on tools for packaging applications. The student learns component testing as well as using services and tools to automate and improve workflow by simplifying compression, minification and production deployment of updates. The course also covers how to maintain, version manage and further develop a product.

## Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. Build system for application deliveries 2.

Component testing 3.

Version management

4. Optimization and production deployment

5. Further development of applications

### Skills 6.

Apply methods for packaging, delivery and follow-up 7. Use build

systems 8. Apply methods

for version management as well as optimization and production setting of applications

9. Apply methods to manage updates to applications

### Competencies

10. Independently assess and evaluate different methods of packaging, delivery and follow-up



## **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-10: written test (IG/G/VG)
- Course objectives 1-10: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

**Principles for grading The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

### **Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

### **Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding the application of the techniques, methods and tools included in this course.



# Syllabus –

## Web security - analysis and implementation

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *30 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** *-*

### Content and

purpose In the course, the student learns to create web applications that meet both functional requirements and also the requirements placed on secure architecture and secure solutions.

The course contains course literature in English. This course literature develops the students' ability to communicate in English within the professional field.

### Training elements: •

Design and development of security solutions •

The attacker's working methods and tools

### Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. Methods for designing and developing security solutions in web development 2.

Sources of security problems in system development and measures to deal with these security problems

3. The attacker's working methods and

tools 4. Privacy by design/built-in data protection - to take privacy protection rules into account when designing IT systems and routines to ensure that the

requirements of the data protection regulation are met and that the individual's rights are protected

### Skills 5.

Apply methods to design and develop security solutions in web development

### Competences

6. Independently assess and evaluate different methods for designing and developing security solutions in web development

### Forms of knowledge control



The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-6: written exam (IG/G/VG)

The course grade is based on a combination of all assessment documents.

Principles for grading The

student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

#### Not Passed (IG)

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

#### Passed (G)

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

#### Well Passed (VG)

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to make well-founded and nuanced assessments regarding the application of the methods and tools included in this course.

# Syllabus – LIA 1





**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

*Scope of the course: 60 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish.*

**Prerequisites:** *Basic JavaScript programming; Web Framework for JavaScript;  
Advanced web development with JavaScript, Frontend  
development: Client*

### Content and purpose

In the first LIA period, the focus is on programming and using the languages and tools that have been taught in the training. The student also gets to develop business acumen and an understanding of what is required to be successful in the consulting role.

### Training elements: •

Implementation of LIA period •

Independently reflect on and evaluate their work and achievements in relation to the goals of this LIA period and analyze, assess and develop their knowledge and skills.

### Course objectives

After completing the course with an approved result, the student must be able to:

#### Knowledge

1. The student must, during the LIA period, apply the knowledge from the the classroom-based courses. The student must also describe and explain The duties of the LIA period and relate the duties to the professional role.

#### Skills 2.

- Apply the knowledge from the classroom-based courses
3. Reflect on and independently evaluate their work and their achievements in relation to the objectives of this LIA period

#### Skills

4. Analyse, assess and develop their knowledge and skills

### Forms of knowledge control

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:



- Course objectives 1-2: The LIA supervisor's assessment of the student's efforts and learning during the LIA period (IG/G) •

Course objectives 1-4: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

Principles for grading The student's

performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).

#### Not Passed (IG)

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

#### Passed (G)

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

#### Well Passed (VG)

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding their own ability to apply the knowledge from the classroom-based courses.



# Syllabus – LIA 2

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *50 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish.*

**Prerequisites:** *Basic JavaScript programming; Web framework for JavaScript; Advanced web development with JavaScript, Frontend development: Client, Web security - analysis and implementation*

## Content and purpose

In the second LIA period, the focus is on web security. The student also further develops his skills in programming and development of various applications and increases his understanding of the consultant role.

## Training elements: •

Implementation of LIA period •

Independently reflect on and evaluate their work and achievements in relation to the goals of this LIA period and analyze, assess and develop their knowledge and skills.

## Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. The student must, during the LIA period, apply the knowledge from the the classroom-based courses. The student must also describe and explain The duties of the LIA period and relate the duties to the professional role.

### Skills 2.

- Apply the knowledge from the classroom-based courses
3. Reflect on and independently evaluate their work and their achievements in relation to the objectives of this LIA period

### Skills

4. Analyze, assess and develop their knowledge and skills



## **Forms of knowledge control**

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-2: The LIA supervisor's assessment of the student's efforts and learning during the LIA period (IG/G) •
- Course objectives 1-4: assignment (IG/G/VG)

The course grade is based on a combination of all assessment documents.

**Principles for grading The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

### **Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

### **Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

### **Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to conduct well-founded and nuanced reasoning and be able to make well-founded and nuanced assessments regarding their own ability to apply the knowledge from the classroom-based courses.



# Syllabus – Degree project

**Training and round:** *Frontend developer specializing in web security, YH00806 - 2022 - 2*

**Scope of the course:** *25 university of applied sciences credits*

**Decided by management team:** *2022-06-03*

**Version:** *1*

**Elective course:** *No*

**Language:** *The course is given in Swedish. Course literature in English may occur*

**Prerequisites:** *Basic JavaScript programming; Web framework for JavaScript; Advanced web development with JavaScript, Frontend Development: Client; Web security - analysis and implementation*

## Content and purpose

The degree project must deepen the student's knowledge, skills and abilities within the professional field. The student must plan and write a work in a suitable area with a clear connection to the professional role. In the degree project, the student's ability to investigate, analyze and summarize information is trained.

## Course objectives

After completing the course with an approved result, the student must be able to:

### Knowledge

1. Methods for systematically and independently searching for, reviewing, evaluating and interpreting information and knowledge in an area with a clear connection to the professional role
2. Methods for verbally and in writing presenting the results of an investigation

### Skills 3. Use

- methods to systematically and independently search, review, evaluate and interpret information and knowledge in an area with a clear connection to the professional role
4. Orally and in writing present the results of an investigation

### Competences

5. Systematically and independently search, review, evaluate and interpret information and knowledge in an area with a clear connection to the professional role

## Forms of knowledge control

The student's knowledge, skills and competencies are assessed based on the results of the following knowledge checks:

- Course objectives 1-5: assignment - degree project (IG/G/VG)

The course grade is based on a combination of all assessment documents.



**Principles for grading The student's performance is graded after the completed course with the grades Not Passed (IG), Passed (G) or Well Passed (VG).**

**Not Passed (IG)**

To receive the grade Not Passed (IG), the student must have completed the course without achieving all course objectives.

**Passed (G)**

To receive the grade Passed (G), the student must have completed the course and achieved all course objectives.

**Well Passed (VG)**

In order to receive the grade Well Passed (VG), the student must have completed the course and achieved all course objectives. The student must also be able to make well-founded and nuanced reasoning that is relevant to the professional role and professional field.