

Guide to Online Application for certificate “Software Innovations for Digital Enterprises”

The application for the additional certificate “Software Innovations for Digital Enterprises” is conducted almost entirely via our online application tool.

Via this application tool

- you register for the application process and enter your contact details for the certificate
- you create the application draft. Before handing it in, this draft may be modified as often as required.
- you hand in your application draft as your course schedule. The schedule will be checked whether the chosen classes fulfil all requirements and do not overlap in content.
- you fill out the final application form, after the course schedule has been accepted.

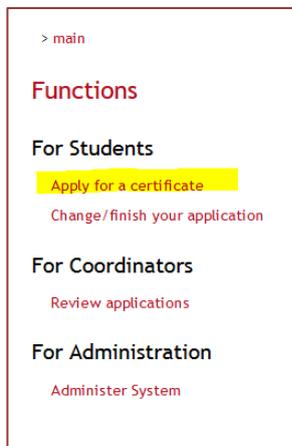
During the last step, you will have to print out the certificate application and your transcript of records. Together with your verified transcript of records, these documents must be handed in to one of our local advisers.

This guide will help you with the application process and explain the online application tool. Please read the following pages before starting the application process.

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Step 1: Register, Create Account and Enter Contact Details, Choose Classes



> main

Functions

For Students

- Apply for a certificate
- Change/finish your application

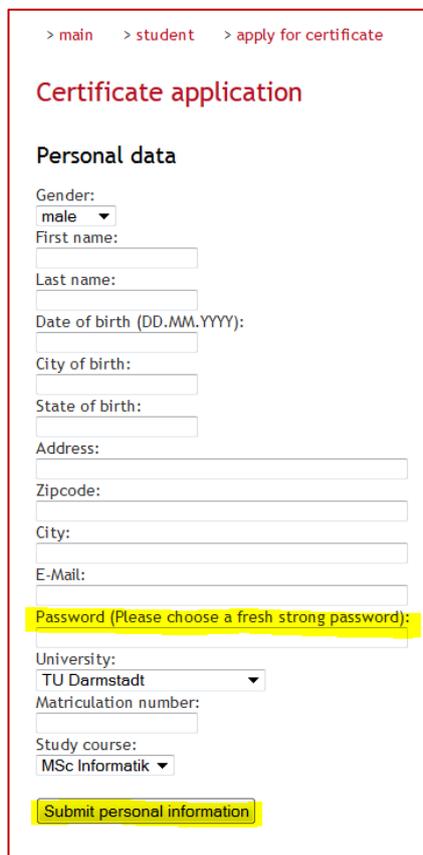
For Coordinators

- Review applications

For Administration

- Administer System

Please select “**Apply for certificate**” in the menu in order to create an account.



> main > student > apply for certificate

Certificate application

Personal data

Gender:

First name:

Last name:

Date of birth (DD.MM.YYYY):

City of birth:

State of birth:

Address:

Zipcode:

City:

E-Mail:

Password (Please choose a fresh strong password):

University:

Matriculation number:

Study course:

Submit personal information

Please fill out the form in the following window, choose a password, and submit the information by clicking on the button “**Submit personal information**”. Your email address will not be passed on to third parties; it will be used as your username. To log into your account and manage your application, you will need to enter your user name and password.

After submitting your information you may select the classes you want to visit or already have visited, which you want to count toward your certificate. Please see section (B) on page 5 for more information on this step.

You can also register for this additional certificate without having to immediately select classes. Please see section (A) on page 4 for more information on this step.

(A) Register without Selecting Classes

Certificate application

Certificate information

Module IT-Security

Course 1:
-
Grade:
-

Course 2:
-
Grade:
-

Course 3:
-
Grade:
-

Course 4:
-
Grade:
-

Module Cloud Computing

Course 5:
-
Grade:
-

Course 6:
-
Grade:
-

Course 7:
-
Grade:
-

Course 8:
-
Grade:
-

Module Pervasive Computing

Course 9:
-
Grade:
-

Course 10:
-
Grade:
-

Course 11:
-
Grade:
-

Course 12:
-
Grade:
-

Module Software-Engineering

Course 13:
-
Grade:
-

Course 14:
-
Grade:
-

Course 15:
-
Grade:
-

Course 16:
-
Grade:
-

<< Back Finish (no external events) Add external events >>

If you do not want to select your classes yet, leave the lists blank, scroll down and click on the button **“Finish (no external events)”** to leave the form of the application draft.

Certificate application

First name:	Hans
Last name:	Hanson
Gender:	male
Date of birth (DD.MM.YYYY):	31.05.1980
City of birth:	Stockholm
State of birth:	Sweden
Address:	Mornewegsraße 32
Zipcode:	64293
City:	Darmstadt
Email:	hans.hanson@gmail.com
University:	TU Darmstadt
Matriculation number:	987654
Study course:	MSc Informatik
Application date (DD.MM.YYYY):	23.07.2013
Course title	Course type

<< Back **Complete application**

After exiting the form of the course selection, you will see an overview of the details you entered and an empty table of courses. By clicking on the button” **Complete application**”, your registration will be complete.

> main > student > apply for certificate

Certificate application

Message

Certificate application was successfully submitted

You are now a registered applicant for the certificate and will receive a confirmation via email.

You may now log in at any time to modify your contact details or

change and add classes to your application draft. Please see section (C) for more information regarding the log in.

(B) Register and Select Classes

After creating an account and entering your contact details, you can select the classes which you want to count toward the certificate. Please only select

classes you have completed or plan on completing. Available for selection are all classes from the modules IT Security, Cloud Computing, Pervasive Computing and Software Engineering. All modules must be covered by attending at least one class (min. 3 Credit Point) from every module. After selecting the class, please enter the achieved grade of the class.

The classes are sorted according to semester, university and type of class.

Navigation: > main > student > apply for certificate

Certificate application

Certificate information

Module IT-Security

Course 1:

- SS 2013 - KIT Karlsruhe - lecture - Ausgewählte Kapitel der Kryptographie - 3cp - (J. Müller-Quade)
- SS 2013 - KIT Karlsruhe - lecture - Datenschutz und Privatheit in vernetzten Informationssystemen - 3cp - (K. Böhm)
- SS 2013 - KIT Karlsruhe - lecture - Symmetrische Verschlüsselungsverfahren - 3cp - (J. Müller-Quade)
- SS 2013 - KIT Karlsruhe - seminar - Kryptographie in der Praxis - 3cp - (J. Müller-Quade)
- SS 2013 - KIT Karlsruhe - practical course - Praktikum: Kryptoanalyse - 3cp - (J. Müller-Quade)
- SS 2013 - TU Darmstadt - lecture - Embedded System Security - 5cp - (A. R. Sadeghi)
- SS 2013 - TU Darmstadt - lecture - Formal Methods for Information Security - 9cp - (H. Mantel)
- SS 2013 - TU Darmstadt - lecture - Human Centred Security - 5cp - (M. Volkamer)
- SS 2013 - TU Darmstadt - lecture - IT Sicherheit - 6cp - (M. Waidner)
- SS 2013 - TU Darmstadt - lecture - IT/Inf.-Sicherheitsmanagement Systeme - 3cp - (W. Böhmer)
- SS 2013 - TU Darmstadt - lecture - Kryptoplexität - 6cp - (M. Fischlin)
- SS 2013 - TU Darmstadt - lecture - Netzsicherheit - 6cp - (M. Hollick)
- SS 2013 - TU Darmstadt - lecture - Privacy-Enhancing Technologies - 3cp - (S. Katzenbeisser)
- SS 2013 - TU Darmstadt - lecture - Public-Key-Infrastrukturen - 6cp - (J. Buchmann)
- SS 2013 - TU Darmstadt - lecture - Sichere Kritische Infrastrukturen - 3cp - (S. Katzenbeisser)
- SS 2013 - TU Darmstadt - lecture - Sichere Mobile Systeme - 3cp - (M. Hollick)
- SS 2013 - TU Darmstadt - lecture - Sicherheit in Multimedia Systemen und Anwendungen - 6cp - (M. Steinebach)
- SS 2013 - TU Darmstadt - seminar - Aktuelle Forschungsthemen in Mobilien Netzen - 3cp - (M. Hollick)
- SS 2013 - TU Darmstadt - seminar - Ausgewählte Themen in der forensischen Linguistik - 3cp - (M. Steinebach)

Grade: -

Course 6: -

Grade: -

Hint: If you haven't completed all of the chosen classes when arranging your application draft, you can add your grades later before requesting your certificate.

The drop-down lists contain all courses of the current semester as well as the courses from past semesters.

You may also select courses which are announced to be offered in future semesters. You may add these classes to your application draft as well.

<< Back Finish (no future courses) Add future courses >>

If you do not wish to select classes offered in the following semesters, you may

close the course selection form by clicking on “**Finish (no future courses)**”.

If you do wish to select classes offered in the following semesters, please click on **“Add future courses”**.

Future courses

Course 17

Course title:

University:

 or type in universities name if not in above list:

Course type:

Module type:

Semester:

Credit points:

Lecturer:

 or type in lecturers name if not in above list:

Grade:

Comments:

You may now select up to four future courses by filling out the necessary fields.

Please close the future course selection form when you have finished selecting and filling out all the fields by clicking on **“Finish”**.

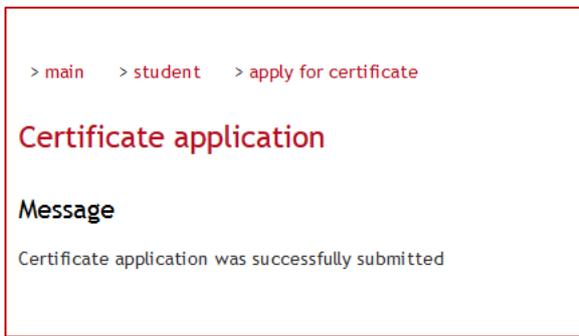
After closing the course selection forms you will see an overview of your application draft with your contact details and selected classes. Please check all your details again and finish working on your application draft by clicking on **“Complete application”**.

Address:	dsfa
Zipcode:	12346
City:	gewrqwer
Email:	sadsf@ffad.de
University:	TU Darmstadt
Matriculation number:	123143
Study course:	MSc Informatik
Application date (DD.MM.YYYY):	24.07.2013

Course title	Course type	University	Lecturer	Semester	Credit points	Grade
Cloud Computing						
Service Analytics	lecture	KIT Karlsruhe	. T. Setzer	SS 2013	5	N/A
IT-Security						
Embedded System Security	lecture	TU Darmstadt	. A. R. Sadeghi	SS 2013	5	N/A
Software-Engineering						
Modellgetriebene Entwicklung	lecture	TU Darmstadt	. Th. Kühne	SS 2013	5	N/A
Pervasive Computing						
Projektpraktikum Multimedia Kommunikation II	practical course	TU Darmstadt	. R. Steinmetz	SS 2013	9 *	N/A
IT-Security						
Spektakuläre Fälle von Cybercrime	exercise	TU Darmstadt		WS 2013/2014		N/A

* max. 6 credit points creditable

[Help with certificate applications](#) | [FAQ](#)

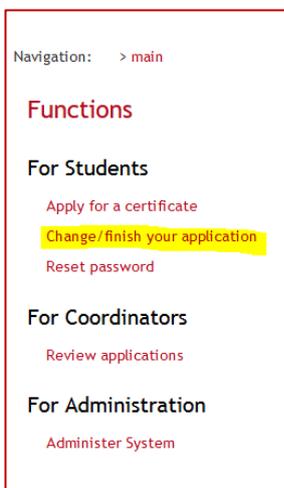


You are now a registered applicant for the certificate and will receive an electronic confirmation for registering.

[Please note that your application draft has not been submitted to one of our advisors, yet. Submitting your course schedule takes place in step 3: Submitting Course Schedule.](#)

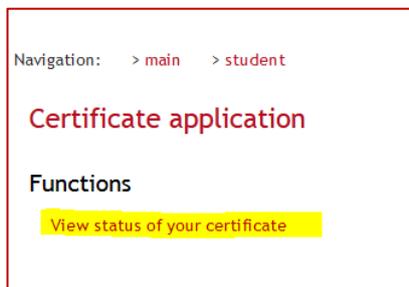
You may now log into your account any time you like to modify your contact details or select more classes for your course schedule. Please see section (C) on page 8 for more information on this step.

(C) Log In and Modify Application Draft



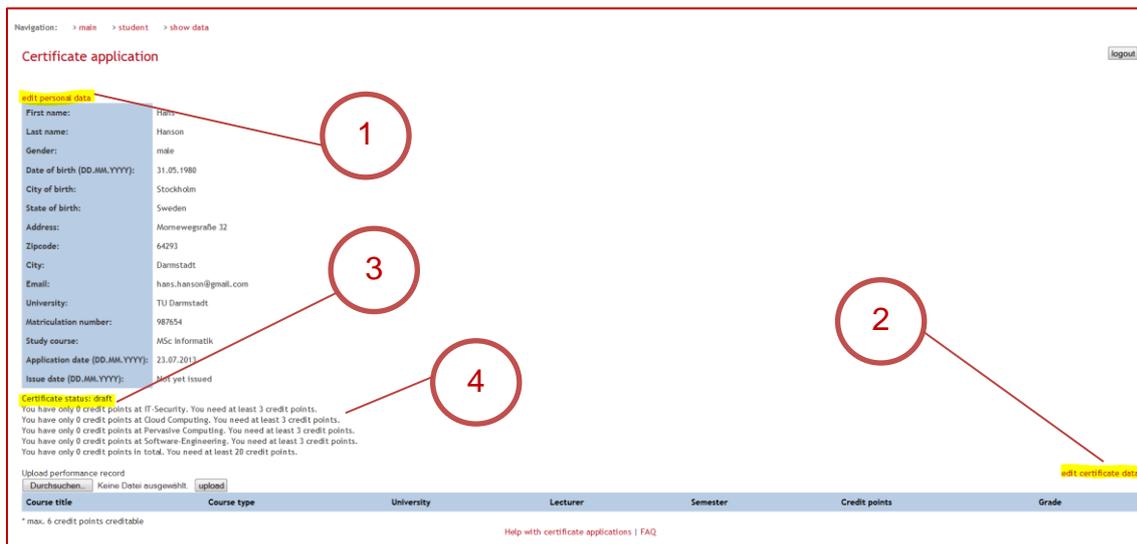
To modify your application draft you have to log on to your account again. Please select “**Change/ finish your application**” in the main menu to log in.

The following window shows two log-in fields on the right hand side. Please enter here your email address and the password chosen at the beginning of your registration.



After the log in, please click on “**View status of your certificate**” to carry out your modifications.

You will see an overview of your application draft, with your contact details and selected classes



1 “edit personal data”: modify or complete your contact details (e.g. enter your new address)

2 “edit certificate data”: modify the selection of courses or add course grades

3 “certificate status”: shows the status of your application

Draft = You have not yet submitted your application. The application draft can be modified as often as required before submitting it as course schedule to your local advisor. The draft has not been checked by your advisor, yet.

Review = Your course schedule is being reviewed. You have submitted your course schedule to the concerning universities for approval (“request review”). Our local advisors will check your course schedule for overlapping content and whether it meets all requirements in order to apply for the certificate. You cannot conduct any modifications on your application.

Please note that for submitting your course schedule, all course information must be complete with the exception of your grades. If your course schedule is approved, you can only add the achieved course grades.

Approved draft = Our local advisors approved your course schedule. You may add now any missing course grades. All other details can no longer be modified.

Request = You have submitted the completed application (“Request certificate”).

Concluded = Our local advisors have accepted your final application for the certificate.

4

Report:

The report is generated automatically. Here you will find helpful advice regarding application formalities, e.g. a missing entry or an incorrect course combination for the certificate. Please revise your course schedule before submitting.

Please note that only when all error messages are revised the submit button “Request review” will appear.

Certificate status: draft
You have only 0 credit points at IT-Security. You need at least 3 credit points.
You have only 0 credit points at Cloud Computing. You need at least 3 credit points.
You have only 0 credit points at Pervasive Computing. You need at least 3 credit points.
You have only 0 credit points at Software-Engineering. You need at least 3 credit points.
You have only 0 credit points in total. You need at least 20 credit points.

Step 2: Create, Modify or Complete Application Draft

Log on to your account and click on “**View status of your certificate**” to carry out your modifications. For more information on the log in process, please see section (C) on page 8

Please click on “**edit certificate data**”.

Course title	Course type	University	Lecturer	Semester	Credit points	Grade
IT-Security						
Embedded System Security	lecture	TU Darmstadt	. A. R. Sadeghi	SS 2013	5	2
Symmetrische Verschlüsselungsverfahren	lecture	KIT Karlsruhe	. J. Müller-Quade	SS 2013	3	3,3
Cloud Computing						
IT-Sicherheitsmanagement für vernetzte Systeme	lecture	KIT Karlsruhe	. H. Hartenstein	WS 2013/2014	5	2,7
Pervasive Computing						
Mobile Networking	lecture	TU Darmstadt	. M. Hollick	WS 2012/2013	6	2,3
Software-Engineering						
Software Engineering in der Industriellen Praxis	lecture	TU Darmstadt	. M. Girschick	WS 2011/2012	3	1,7

* max. 6 credit points creditable
[Request review](#)

[Help with certificate applications](#) | [FAQ](#)

Please select your classes from the drop-down lists of the four modules IT-Security, Cloud Computing, Pervasive Computing and Software Engineering and enter the obtained grades in the respective classes, if already completed. The classes are sorted according to semester, university and type of class.

Hint: If you have not completed all of your selected classes, you will still have the chance to add your course grades before your final submission of the application. Submitting your course schedule for approval does not require that all the selected classes have been completed, yet.

Certificate information

Module IT-Security

Course 1:
SS 2013 - TU Darmstadt - lecture - Embedded System Security - 5cp - (A. R. Sadeghi)

Course 2:
SS 2013 - KIT Karlsruhe - lecture - Symmetrische Verschlüsselungsverfahren - 3cp - (J. Müller-Quade)

Course 3:
-

Course 4:
-

Module Cloud Computing

Course 5:
WS 2013/2014 - KIT Karlsruhe - lecture - IT-Sicherheitsmanagement für vernetzte Systeme - 5cp - (H. Hartenstein)

WS 2013/2014 - KIT Karlsruhe - lecture - Modellierung und Simulation von Netzen und verteilten Systemen - 4cp - (H. Hartenstein)

SS 2013 - KIT Karlsruhe - lecture - Netzsicherheit: Architekturen und Protokolle - 4cp - (M. Schöller)

SS 2013 - KIT Karlsruhe - lecture - Next Generation Internet - 4cp - (D. Martin)

SS 2013 - KIT Karlsruhe - lecture - Service Analytics - 5cp - (T. Selzer)

SS 2013 - KIT Karlsruhe - seminar - e-Organization: Cloud Service Engineering & Management - 3cp - (S. Tai)

SS 2013 - KIT Karlsruhe - seminar - IT-Sicherheitsmanagement: Cloud, Storage, Identitätsmanagement - 3cp - (H. Hartenstein)

SS 2013 - KIT Karlsruhe - seminar - System Aspects of Cloud Computing - 3cp - (F. Bellosa)

SS 2013 - KIT Karlsruhe - practical course - Praktikum Software-Qualität auf Cloud-Großrechner IBM z10 - 6cp - (R. Reussner, R. Vaupel)

SS 2013 - KIT Karlsruhe - practical course - Web Services - 4cp - (S. Tai)

SS 2013 - TU Darmstadt - lecture - Communication Networks IV (KN IV) - 3cp - (R. Steinmetz)

SS 2013 - TU Darmstadt - lecture - Peer-to-Peer II - Methoden - 3cp - (D. Hausheer)

SS 2013 - TU Darmstadt - lecture - Quality-of-Service in Telecommunication - 3cp - (G. Hasslinger)

SS 2013 - TU Darmstadt - seminar - P2P - 3cp - (T. Strufe)

SS 2013 - TU Darmstadt - practical course - Internet - Praktikum Telekooperation - 6cp - (M. Mühlhäuser)

SS 2013 - TU Darmstadt - practical course - Peer-to-Peer-Middleware - 6cp - (A. Buchmann)

SS 2013 - TU Kaiserslautern - lecture - Service-orientierte Architekturen (SOA) - 4cp - (P. Müller)

SS 2013 - TU Kaiserslautern - seminar - Service-orientation in Communication and Applications - 4cp - (P. Müller)

SS 2013 - Universität des Saarlandes - lecture - Data Networks - 9cp - (V. Wolf)

WS 2012/2013 - TU Darmstadt - lecture - Mobile Networking - 6cp - (M. Hollick)

Grade:

Future courses

Course 17

Course title:

University:

or type in universities name if not in above list:

Course type:

Lecture

Module type:

IT-Security

Semester:

WS 2009/2010

Credit points:

Lecturer:

or type in lecturers name if not in above list:

Grade:

Comments:

You may also select courses which are announced to be offered in future semesters. You may add these classes to your application draft as well.

or type in lecturers name if not in above list:

Grade:

Comments:

Please save your arrangement of classes as your latest application draft by clicking on **“Save changes”**.

You will receive the electronic confirmation “Certificate application was successfully edited”.

Please note that your application draft has not been submitted to one of our advisors, yet. Submitting your course schedule takes place in step 3: Submitting Course Schedule.

Navigation: > main > student > **show data** > **edit certificate data**

Certificate application

Certificate application was successfully edited.

Hint: Click on **“show data”** and **“edit certificate data”** in the navigation bar to see your saved information again or

modify them as long as you are logged in.

After modifying and completing your application draft within a few steps, you may now submit your course schedule for review.

Step 3: Submitting Course Schedule

Log on to your account and click on “**View status of your certificate**” to request a review. For more information on the log in Process, please see section (C) on page 8

Your application status should read “draft”.

Please note that for submitting your course schedule, all course information must be complete with the exception of your grades. If your course schedule is approved, you can only add the achieved course grades, but not change classes.

Upload performance record
Durchsuchen... Keine Datei ausgewählt. **upload**

Course title

IT-Security

Embedded System Security

Symmetrische Verschlüsselungsverfahren

Cloud Computing

IT-Sicherheitsmanagement für vernetzte Systeme

Pervasive Computing

Mobile Networking

Software-Engineering

Software Engineering in der industriellen Praxis

* max. 6 credit points creditable
Request review

Please upload now your performance record/transcript of records as a verification of your stated grades. Please upload only ONE pdf- or zip-file.

Please note that you will still be able to update your transcript of records before the final submission, if you have not completed all courses, yet.

Email: hans.hanson@gmail.com
University: TU Darmstadt
Matriculation number: 987654
Study course: MSc Informatik
Application date (DD.MM.YYYY): 23.07.2013
Issue date (DD.MM.YYYY): Not yet issued

Certificate status: draft

Upload performance record
Durchsuchen... Keine Datei ausgewählt. **upload**

Course title

IT-Security

Embedded System Security

Symmetrische Verschlüsselungsverfahren

Cloud Computing

IT-Sicherheitsmanagement für vernetzte Systeme

Pervasive Computing

Mobile Networking

Software-Engineering

Software Engineering in der industriellen Praxis

* max. 6 credit points creditable
Request review

Please click on “**Request review**” to have your course schedule checked by our local advisors.

Please note that your certificate status will change to “review”. For the time that your course schedule is

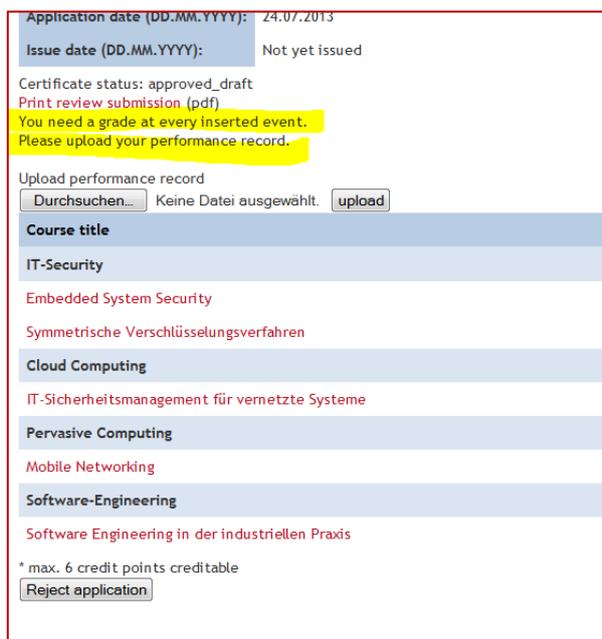
being reviewed, you cannot make any changes in your application. Only after our local advisor has accepted or declined your application you will be able to make some changes.

Our local advisors will receive an electronic notification as soon as you have submitted your application to them. If your course schedule includes classes from different universities, your course schedule will be submitted to all advisors concerned.

Please understand that the review of the course schedules may take some time; especially when involving more than one university. If you have questions regarding the process of your application, please contact our local advisors.

Step 4: Complete Application

(A) Course Schedule Accepted



The screenshot shows a web application interface with the following elements:

- Application date (DD.MM.YYYY): 24.07.2013
- Issue date (DD.MM.YYYY): Not yet issued
- Certificate status: approved_draft
- Print review submission (pdf)
- Yellow highlighted text: "You need a grade at every inserted event. Please upload your performance record."
- Upload performance record section with a search button "Durchsuchen...", a status "Keine Datei ausgewählt.", and an "upload" button.
- A list of selected courses, each with a blue header bar and red text below it:
 - IT-Security
 - Embedded System Security
 - Symmetrische Verschlüsselungsverfahren
 - Cloud Computing
 - IT-Sicherheitsmanagement für vernetzte Systeme
 - Pervasive Computing
 - Mobile Networking
 - Software-Engineering
 - Software Engineering in der industriellen Praxis
- * max. 6 credit points creditable
- Reject application button

You will receive an email, saying: "Your certificate status has been set to 'approved_draft". Please visit <http://qualifizierung.software-cluster.org> for further details", if all of our local advisors have accepted your course schedule.

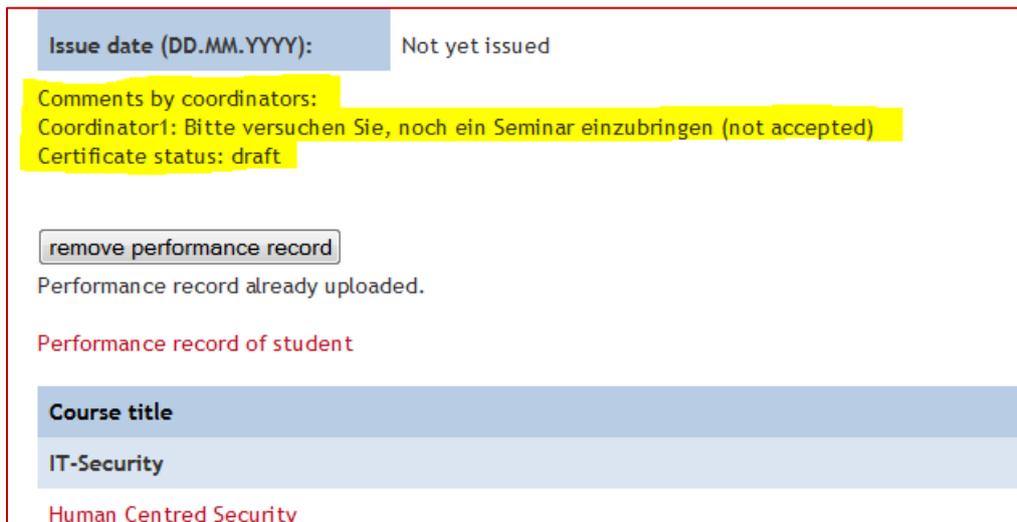
When you log on to your account again, you will find your certificate status changed to "approved_draft". If you have not entered your grades for all of the selected classes, you may now do so. Grades can be edited via "edit certificate data".

Please see step 5 for details regarding the final application.

(B) Course Schedule declined

If your course schedule has been rejected, you will receive an email, saying: “*certificate status has been set to 'draft'. Please visit <http://qualifizierung.software-cluster.org> for further details*”.

When you log on to your account again, you will find the reason commented by one of our local advisors for declining your application.



The screenshot shows a user interface with the following elements:

- Issue date (DD.MM.YYYY):** Not yet issued
- Comments by coordinators:**
 - Coordinator1: Bitte versuchen Sie, noch ein Seminar einzubringen (not accepted)
 - Certificate status: draft
- remove performance record** button
- Performance record already uploaded.
- Performance record of student
- Course title**
 - IT-Security
 - Human Centred Security

You will find your certificate status changed back to “draft”. You may now modify your application draft again and submit it afterwards as your new course schedule.

Step 5: Request Certificate

After your course schedule has been accepted and you have entered the grades for all of your selected classes, you have to upload an updated transcript of records as proof.



The screenshot shows a user interface with the following elements:

- Certificate status: approved_draft
- [Print review submission \(pdf\)](#)
- remove performance record** button
- Performance record already uploaded.
- Performance record of student

If you have uploaded a transcript of records earlier, you will have to remove it and replace it with an updated one.

Upload performance record

Keine Datei ausgewählt.

Course title

IT-Security

Embedded System Security

Symmetrische Verschlüsselungsverfahren

Cloud Computing

IT-Sicherheitsmanagement für vernetzte Systeme

Pervasive Computing

Mobile Networking

Software-Engineering

Software Engineering in der industriellen Praxis

* max. 6 credit points creditable

Please upload now your performance record/transcript of records as a verification of your stated grades. Please upload only ONE pdf- or zip-file.

Performance record already uploaded.

Performance record of student

Course title

IT-Security

Human Centred Security

Cloud Computing

Peer-to-Peer II - Methoden

P2P

Pervasive Computing

Sprachkommunikationssysteme

Software-Engineering

Software Engineering Design & Construction

* max. 6 credit points creditable

If all the required details have been entered, you may click on **“Request certificate”** for your final submission.

Our local advisors will receive an electronic notification as soon as you have submitted your request to them.

Issue date (DD.MM.YYYY): Not yet issued

Certificate status: request

Course title

IT-Security

After electronically submitting your certificate request, please also print out your application and performance record/ transcript of records.

 Software-Cluster

Name: Susi Sonntag
Geboren am: 1991-01-01 in London, UK
E-Mail: susi.sonntag@software-cluster.org
Universität: TU Darmstadt
Matrikel Nummer: 456789
Studiengang: MS-Information

Zertifikatsbeantragung

Ich, Susi Sonntag, bitte, dass Sie mir das Zertifikat "Softwareinnovationen für das Digitale Unternehmen" ausstellen. Ich habe folgende Veranstaltungen besucht:

Abgeschlossene Veranstaltungen	Universität	Semester	CP	Note
IT-Security Vorlesung Human Centred Security (M. Volkamer)	TU Darmstadt	SS 2013	5	1,0
Cloud Computing Vorlesung Peer-to-Peer II - Methoden (D. Heusch)	TU Darmstadt	SS 2012	3	1,0
Cloud Computing Seminar P2P (T. Strufe)	TU Darmstadt	WS 2012/2013	3	1,0
Pervasive Computing Vorlesung Sprachkommunikationssysteme (D. Schmalé-Walka)	TU Darmstadt	SS 2013	6	2,0
Software-Engineering Vorlesung Software Engineering Design Construction (M. Eichberg)	TU Darmstadt	SS 2013	8	1,7

Alle IT-Logos sind ohne Gewähr. Individuell sind die Logos für die Software-Innovationen.

Darmstadt, den **Susi Sonntag**
Unterschrift

Please date and sign the printed certificate request and hand it in to one of our local advisors.

Only a signed and submitted application may lead to the issue of the certificate!