



Comprehensive guidelines for degree project courses, common goals and assessment criteria (applies from 01/07/2015)

President's decision V-2015-0144. The guidelines apply from 01/07/2015.

Establishment

The scope and area of the degree project course is determined by the Swedish Higher Education Ordinance Annex 2 Qualifications Ordinance; independent work and KTH's local regulations for first and second-cycle degrees, local regulation for qualifications

Recommendations for the subject of the degree project are provided within the school. The degree project shall be carried out within the main technical field or subject area of the degree. If the student wishes to carry out the degree project in an area outside of this, approval must be obtained from the director of first and second cycle education before work commences.

The following titles (where xxx is the main area, subject area or technical field) shall be used for degree project courses:

Degree project in xxx, second cycle, 30 credits

Degree project in xxx, second cycle, 15 credits

Degree project in xxx, first cycle, 15 credits

Degree project in xxx, first cycle__credits

Scope

Degree project course totalling, for

- Architect, Master of Science in Engineering, Master of Science in Engineering and of Education: 30 credits
- Master of Science in Secondary Education: 15 credits
- Bachelor of Engineering, other Bachelor's degree, Master's degree (60 credits): 15 credits
- Higher Education Diploma: minimum 7.5 credits

Entry requirements

The degree project must be a concluding course for KTH's study programmes. Before commencing a degree project, the student must have attained a sufficient number of credits within the programme. The criteria are as follows:

- Architectural programme Minimum 270 credits
- Master of Science in Engineering: Minimum 240 credits
- Master's programmes (120 credits): Minimum 60 credits, 30 of which with in-depth studies at second-cycle level in the main area of study
- Master's programmes (60 credits): Minimum 30 credits, 15 of which with in-depth studies at second-cycle level in the main area of study
- Master of Science in Secondary Education: Minimum 225 credits
- Bachelor of Science in Engineering: Minimum 120 credits
- Bachelor's programmes: Minimum 120 credits, 60 of which with gradual in-depth studies at first-cycle level in the main area of study
- Bachelor's programme in Architecture: Minimum 150 credits in the architectural field, with gradual in-depth studies at first-cycle level in the main area of study; architecture
- Higher education degree: Minimum 80 credits

Additional requirements (entry requirements) for commencing a degree project must be specified in the official course syllabus.

The degree project must normally be carried out during the last semester of the study programme. The examiner will check that the student meets the eligibility requirements stipulated in the guidelines and official course syllabus. Exemption from the entry requirements may be granted by the director of undergraduate and master's studies, following a review of the case.

Forms of degree project

The degree project can be carried out within KTH or externally. The degree project can also be carried out abroad. The degree project is carried out individually or together with another student. If the work is carried out by several students, the examiner shall ensure that each student meets the requirements for acceptable performance.

Supervisors are appointed by the examiner. Several supervisors can be appointed. If the degree project is carried out within a company, for example, the company should also appoint a supervisor. The degree project will be presented in a seminar. The degree project must be written and presented in Swedish or English. A summary must be available in both languages. The degree project report will be checked for plagiarism.

The President decides on the following common goals and assessment criteria for degree project courses at KTH:

Appendix 1: [Degree project, 30 cr for Master of Science degree, 300 credits \(pdf 69 kB\)](#)

Appendix 2: [Degree project, 30 cr, Master of Architecture, 300 credits, and Master's Programme, Architecture, 120 credits \(pdf 68 kB\)](#)

Appendix 3: [Degree project, 30 cr, Master of Science in Engineering and of Education, 300 credits \(pdf 70 kB\)](#)

Appendix 4: [Degree project, 30 cr for Master's Programme, 120 credits \(pdf 68 kB\)](#)

Appendix 5: [Degree project, 15 cr for Master's Programme, 60 credits \(pdf 68 kB\)](#)

Appendix 6: [Degree project, 15 cr for Bachelor of Science in Engineering, 180 credits \(pdf 69 kB\)](#)

Appendix 7: [Degree project, 15 cr for Bachelor of Technology, 180 credits \(pdf 67 kB\)](#)

Appendix 8: [Degree project, 15 cr for Bachelor of Architecture, 180 credits \(pdf 64 kB\)](#)

Appendix 9: [Degree project of min. 7.5 cr for Higher Education Diploma, 120 credits \(pdf 63 kB\)](#)

Appendix 10: [Degree project, 15 cr for Master of Science in Secondary Education, 270 credits \(pdf 70 kB\)](#)

Together with goals and criteria for a “pass”, guidelines are also provided for “fail” criteria. Additional goals for degree project courses can be decided by the respective school and must be specified in the official course syllabus.

KTH V-2015-0144 Appendix 1: Goals and criteria: Degree project 30 cr for Master of Science degree, 300 cr

Goals Criteria for PASS Guidelines for FAIL-mark

After completion of the degree project, the student should be able to

1. demonstrate knowledge of the scientific grounds of their chosen subject area, as well as in-depth insight into current research and development and in-depth knowledge of relevant methodology.	The literature study is well executed. Current research and developing with bearing on the work is shown clearly. The student's choice of method is well-founded, based on science or proven experience, and evaluated against other methods. Relevant knowledge from the courses of the programme has been adequately applied.	The literature study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme.
2. demonstrate the ability to search for, gather and integrate knowledge and identify their need for additional knowledge, all with a holistic, critical and systematic approach	The task of the degree project is handled independently and systematically, based on critical analysis and synthesis of relevant literature. The work demonstrates a holistic approach. Carefully selected databases and search tools are used. The need for additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The literature is handled with an uncritical approach. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, questions and situations, even with limited information	Relevant complex phenomena, questions and situations are identified in the degree project. The work shows clearly that these have been handled and analysed well, despite the available information being limited. Assessments linked to the questions posed in the degree project and the findings from these are adequate.	Complex phenomena, questions or situations are not formulated, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with adequate methods, carry out skilled tasks within a given time frame and evaluate this work	The schedule drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.	The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the ability to develop and evaluate products, processes, systems, methods or technical solutions with respect to people's circumstances and needs, as well as society's goals in terms of economically, socially and ecologically sustainable development	The chosen strategy is explained and implemented in such a way that developed and evaluated products, processes, methods, systems or technical solutions are adapted to people's needs and circumstances. Relevant social goals are taken into consideration in such a way that future generations' ability to meet their own needs is not compromised.	The product, process, system, method or technical solution has not been evaluated or developed in the degree project. Relevant analysis of manageability for an effect on people, society, the environment and economy is inadequate or missing.
6. demonstrate the capacity, both orally and in writing, in dialogue with different groups, to clearly account for and discuss their conclusions and the knowledge and arguments on which these are based	The report is well-organised, well-formulated linguistically and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work and conclusions.
7. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
8. demonstrate the skills required to participate in research and development work or to independently work in other skilled activities	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.

KTH V-2015-0144 Appendix 2: Goals and criteria: Degree project, 30 cr, Master of Architecture, 300 cr, and Master's Programme, Architecture, 120 credits

Goals **Criteria for PASS** **Guidelines for FAIL-mark**

After completion of the degree project, the student should be able to

<p>1. - demonstrate the ability to develop the subject of architecture, demonstrate how the degree project relates to a contemporary architectural context and contemporary architectural problems and thereby demonstrate an academic and professional competence as an architect.</p>	<p>The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific and artistic grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant. Relevant questions and situations are identified in the degree project.</p>	<p>Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed. Complex questions or situations are not formulated, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.</p>
<p>2.- demonstrate knowledge of the scientific and artistic grounds of the area, as well as insight into relevant research and development.</p>	<p>The background study is well executed. Current research and developing with bearing on the work is shown clearly.</p>	<p>The background study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme.</p>
<p>3.- reflect on and formulate clear questions, reflect on and develop methods and design techniques, and identify their need of additional knowledge.</p>	<p>The schedule (Thesis Booklet) drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined. The need for additional knowledge is discussed.</p>	<p>The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology. There is no discussion on development of the work.</p>
<p>4.- handle complex contexts, develop and demonstrate an in-depth understanding of programmes/functions, contexts, technology and society's goals for economically, socially and ecologically sustainable development.</p>	<p>The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently. Relevant social goals are taken into consideration in such a way that future generations' opportunities are not compromised.</p>	<p>Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions. There is a lack of relevant analysis of sustainable development.</p>
<p>5- reflect on and evaluate the consequences of the degree project, and reflect on and evaluate the knowledge the student has acquired during the work on the degree project.</p>	<p>The task of the degree project is handled independently and systematically, based on critical analysis and synthesis of relevant references. The work demonstrates a holistic approach.</p>	<p>The task has not been managed independently. There is a significant lack of relevant references, or they have not been integrated in the work. The references are handled with an uncritical approach. The work is not based on existing knowledge in the area.</p>
<p>6 - communicate and present their project to a panel and clearly communicate the acquired knowledge within the established time frame.</p>	<p>The work is well-organised, well-formulated and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.</p>	<p>The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The work is not well-formulated or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work and conclusions.</p>

KTH V-2015-0144 Appendix 3: Goals and criteria: Degree project, 30 cr, Master of Science in Engineering and of Education, 300 cr

Goals	Criteria for PASS	Guidelines for FAIL-mark
After completion of the degree project, the student should be able to		
1. demonstrate knowledge of the scientific grounds of their chosen subject area, as well as in-depth insight into current research and development and in-depth knowledge of relevant methodology.	The literature study is well executed. Current research and developing with bearing on the work is shown clearly. The student's choice of method is well-founded, based on science or proven experience, and evaluated against other methods. Relevant knowledge from the courses of the programme has been adequately applied. The work contains a question relative to pupils or adults' learning.	The literature study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme. The work does not contain questions relative to pupils or adults' learning.
2. demonstrate the ability to search for, gather and integrate knowledge and identify their need for additional knowledge, all with a holistic, critical and systematic approach	The task of the degree project is handled independently and systematically, based on critical analysis and synthesis of relevant literature. The work demonstrates a holistic approach. Carefully selected databases and search tools are used. Other relevant sources of knowledge are taken into consideration and the need of additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The literature is handled with an uncritical approach. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, questions and situations, even with limited information	Relevant complex phenomena, questions and situations are identified in the degree project. The work shows clearly that these have been handled and analysed well, despite the available information being limited. Assessments linked to the questions posed in the degree project and the findings from these are adequate.	Complex phenomena, questions or situations are not formulated, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with adequate methods, carry out skilled tasks within a given time frame and evaluate this work	The schedule drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.	The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the ability to develop and evaluate products, processes, systems, methods or technical solutions with respect to people's circumstances and needs, as well as society's goals in terms of economically, socially and ecologically sustainable development	The chosen strategy is explained and implemented in such a way that developed and evaluated products, processes, methods, systems or technical solutions are adapted to people's needs and circumstances. Relevant social goals are taken into consideration in such a way that future generations' ability to meet their own needs is not compromised.	The product, process, system, method or technical solution has not been evaluated or developed in the degree project. Relevant analysis of manageability for an effect on people, society, the environment and economy is inadequate or missing.
6. demonstrate the capacity, both orally and in writing, in dialogue with different groups, to clearly account for and discuss their conclusions and the knowledge and arguments on which these are based	The report is well-organised, well-formulated linguistically and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work and conclusions.
7. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
8. demonstrate the skills required to participate in research and development work or to independently work in other skilled activities	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.

After completion of the degree project, the student should be able to

1. demonstrate knowledge of the scientific grounds of their chosen subject area, as well as in-depth insight into current research and development and in-depth knowledge of relevant methodology.	The literature study is well executed. Current research and developing with bearing on the work is shown clearly. The student's choice of method is well-founded, based on science or proven experience, and evaluated against other methods. Relevant knowledge from the courses of the programme has been adequately applied.	The literature study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme.
2. demonstrate the ability to search for, gather and integrate knowledge and identify their need for additional knowledge, all with a holistic, critical and systematic approach	The task of the degree project is handled independently and systematically, based on critical analysis and synthesis of relevant literature. The work demonstrates a holistic approach. Carefully selected databases and search tools are used. The need for additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The literature is handled with an uncritical approach. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, questions and situations, even with limited information	Relevant complex phenomena, questions and situations are identified in the degree project. The work shows clearly that these have been handled and analysed well, despite the available information being limited. Assessments linked to the questions posed in the degree project and the findings from these are adequate.	Complex phenomena, questions or situations are not formulated, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with adequate methods, carry out skilled tasks within a given time frame and evaluate this work	The schedule drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.	The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the capacity, both orally and in writing, in dialogue with different groups, to clearly account for and discuss their conclusions and the knowledge and arguments on which these are based	The report is well-organised, well-formulated linguistically and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work and conclusions.
6. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
7. demonstrate the skills required to participate in research and development work or to independently work in other skilled activities	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.

After completion of the degree project, the student should be able to

1. demonstrate knowledge of the scientific grounds, insight into current research and development and in-depth knowledge of relevant methodology.	The literature study is well executed. Current research and development linked to the degree project is presented. The student's choice of method is well-founded, scientifically based, and evaluated against other methods. Relevant knowledge from the courses of the programme has been adequately applied.	The literature study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme.
2. demonstrate the ability to systematically search for, gather and integrate knowledge and identify their need for additional knowledge	The task of the degree project is handled independently and systematically, based on critical analysis and synthesis of relevant literature. Carefully selected databases and search tools are used. The need for additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, questions and situations, even with limited information	Relevant complex phenomena, questions and situations are identified in the degree project. The work shows clearly that these have been handled and analysed well, despite the available information being limited. Assessments linked to the questions posed in the degree project and the findings from these are adequate.	Complex phenomena, questions or situations are not identified, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with adequate methods, carry out skilled tasks within a given time frame and evaluate this work	The schedule drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.	The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the capacity, both orally and in writing, in dialogue with different groups, to clearly account for and discuss their conclusions and the knowledge and arguments on which these are based	The report is well-organised, well-formulated linguistically and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work.
6. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
7. demonstrate the skills required to participate in research and development work or to independently work in other skilled activities	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.

After completion of the degree project, the student should be able to

<p>1. demonstrate knowledge of the scientific grounds of their chosen subject area, as well as knowledge of current research and development.</p>	<p>A literature study has been conducted and contains a description of tried and tested methods within the subject area, as well as certain orientation in current research and development. The chosen method has been justified and is based on science or proven experience. Relevant knowledge from the courses of the programme has been adequately applied.</p>	<p>The literature study is inadequate. Links to current research and development are lacking or insufficient. The justification of the chosen method is unsatisfactory. The work shows a lack of knowledge from previous courses in the programme.</p>
<p>2. demonstrate the ability to search for, gather and use knowledge and identify their need for additional knowledge, all with a holistic, critical and systematic approach</p>	<p>The task of the degree project is handled independently and systematically, based on critical analysis and use of relevant literature. The work demonstrates a holistic approach. Carefully selected databases and search tools are used. The need for additional knowledge is discussed.</p>	<p>There is a significant lack of relevant literature, or it has not been integrated in the work. The literature has been handled with an uncritical approach. The work is not based on existing knowledge in the area. There is no discussion on development of the work.</p>
<p>3. demonstrate the ability to formulate, assess and handle problems and critically discuss questions</p>	<p>The degree project contains clear formulation of the problem and a progression in the handling of this. Critical discussion is conducted on relevant phenomena, questions and situations linked to the work. Assessments linked to the questions posed in the degree project are adequate.</p>	<p>Both the problem formulation and the development of this are inadequate. Relevant questions are not discussed in the degree project. There is a lack of relevant assessments linked to the questions posed in the degree project.</p>
<p>4. demonstrate the ability to plan and, with adequate methods, carry out tasks within a given time frame and evaluate this work</p>	<p>The schedule drawn up at the start of the degree project has been followed. The work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.</p>	<p>The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed plan has not been adhered to in terms of schedule and methodology.</p>
<p>5. demonstrate the ability to formulate and handle products, processes, methods, systems or technical solutions with respect to people's circumstances and needs, as well as society's goals in terms of economically, socially and ecologically sustainable development</p>	<p>The chosen strategy is explained and implemented in such a way that designed products, processes, methods, systems or technical solutions are adapted to people's needs and circumstances. Relevant social goals are taken into consideration in such a way that future generations' ability to meet their own needs is not compromised.</p>	<p>The product, process, system, method or technical solution has not been designed or discussed in the degree project. Relevant analysis of manageability for an effect on people, society, the environment and economy is inadequate or missing.</p>
<p>6. demonstrate the ability, both orally and in writing, in dialogue with different groups, to present and discuss information, problems and solutions</p>	<p>The report is well-organised, well-formulated linguistically and coherent. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work with various parties such as clients, supervisors, teachers, researchers and students.</p>	<p>The content is not presented systematically, and the text or the oral presentation is difficult to understand. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work.</p>
<p>7. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects</p>	<p>The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.</p>	<p>Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.</p>
<p>8. demonstrate the skills necessary to work independently as a qualified engineer</p>	<p>The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to examine and evaluate information in discussions of the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.</p>	<p>Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.</p>

After completion of the degree project, the student should be able to

1. demonstrate knowledge of the chosen subject area's scientific grounds and applicable methods, orientation in current research and development, and in-depth knowledge of a specific part of the subject area	A literature study has been conducted and contains a description of applicable methods within the subject area, as well as orientation in current research and development. The chosen method has been justified and is based on science or proven experience. Relevant knowledge from the courses of the programme has been adequately applied.	The literature study is inadequate. Links to current research and development are lacking or insufficient. The justification of the chosen method is unsatisfactory. The work shows a lack of knowledge from previous courses in the programme.
2. demonstrate the ability to adopt a critical approach to searching for, gathering and using relevant information, as well as the ability to identify their need for additional knowledge	The task of the degree project is largely handled independently. Carefully selected databases and search tools are used. Relevant literature and knowledge are integrated in the degree project. The need for additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to formulate, assess and handle problems and critically discuss phenomena, questions and situations	The degree project contains clear formulation of the problem and a progression in the handling of this. Critical discussion is conducted on relevant phenomena, questions and situations linked to the work. Assessments linked to the question(s) posed in the degree project are adequate.	Both the problem formulation and the development of this are inadequate. Relevant phenomena, questions or situations are not discussed in the degree project. There is a lack of adequate assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with suitable methods, carry out tasks within a given time frame	The schedule drawn up at the start of the degree project has been followed. The work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor.	The work is not of the standard initially set or, where applicable, the new standard agreed on. The agreed plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the ability, both orally and in writing, in dialogue with different groups, to present and discuss information, problems and solutions	The report is well-organised, well-formulated linguistically and coherent. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work.
6. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
7. demonstrate the skills necessary to work independently in a specific part of the main technical field	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to examine and value information in discussions of the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.

After completion of the degree project, the student should be able to

<p>1. The student must be able to demonstrate the ability to handle a complex program for a building and develop this into an elaborate architectonic project which stands in relation to the needs and circumstances of the building and the surrounding environment. The student must be able to present the building's three-dimensional construction and its relationship to the surrounding environment.</p>	<p>The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant (i.e., subject-related) assessments with scientific and artistic grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.</p>	<p>Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.</p>
<p>2. The student must demonstrate an understanding of construction engineering systems and work with various architectonic and technical aspects of a certain complexity, and synthesise these into a coherent architectonic entity, especially in relation to society's goals for sustainable development.</p>	<p>The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently. Relevant social goals are taken into consideration in such a way that future generations' opportunities are not compromised.</p>	<p>Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions. There is a lack of relevant analysis of sustainable development.</p>
<p>3. The student must be able to discuss and argue the standpoints in their project, describe them, and make assessments based on the fundamental terminology from first cycle level. They must also be able to present and have a good grasp of digital/analogue tools and presentation technique, and demonstrate orientation in current research topics.</p>	<p>The work is well-organised, well-formulated and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.</p>	<p>The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The work is not well-formulated or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work and conclusions.</p>
<p>4. The student must reflect on their learning process</p>	<p>The task of the degree project is handled systematically, based on critical analysis and synthesis of relevant references.</p>	<p>There is a significant lack of relevant references, or they have not been integrated in the work. The references are handled with an uncritical approach. The work is not based on existing knowledge in the area.</p>

KTH V-2015-0144 Appendix 9: Goals and criteria: Degree project of min. 7.5 cr for Higher Education Diploma, 120 cr

Goals

Criteria for PASS

Guidelines for FAIL-mark

After completion of the degree project, the student should be able to

<p>1. demonstrate awareness of the scientific grounds of the chosen subject area and knowledge of a number of suitable methods in the area</p>	<p>A literature study has been performed and contains descriptions of a number of suitable methods in the subject area. The chosen method has been justified and is based on science or proven experience. Relevant knowledge from the courses of the programme has been adequately applied.</p>	<p>The literature study is inadequate. The justification of the chosen method is unsatisfactory. The work shows a lack of knowledge from previous courses in the programme.</p>
<p>2. demonstrate the ability to adopt a critical approach to searching for, gathering and using relevant information</p>	<p>The task of the degree project is largely handled independently. Carefully selected databases and search tools are used. Relevant literature and knowledge are integrated in the degree project.</p>	<p>There is a significant lack of relevant literature, or it has not been integrated in the work. The work is not based on existing knowledge in the area.</p>
<p>3. demonstrate the ability to present and discuss their knowledge with different groups</p>	<p>The report is well-organised, well-formulated linguistically and coherent. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and discuss the work with various parties such as clients, supervisors, teachers and students.</p>	<p>The content is not presented systematically, and the text or the oral presentation is difficult to understand. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate the ability to present and discuss the work.</p>
<p>4. demonstrate the ability to address relevant ethical questions</p>	<p>The degree project demonstrates the ability to address relevant ethical questions, where these are not deemed irrelevant.</p>	<p>The degree project does not address ethical questions, despite the fact that these may be relevant to the project, or there is no justification for why these questions were not addressed.</p>
<p>5. demonstrate the skills necessary to work independently with certain tasks in a specific part of the main area of engineering</p>	<p>The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to examine and evaluate information in discussions of the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.</p>	<p>Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.</p>

KTH V-2015-0144 Appendix 10: Goals and criteria: Degree project, 15 ECTS credits for degree of Master of Science in Secondary Education 270 cr

Goals	Criteria for PASS	Guidelines for FAIL
After completing the degree project, the student should be able to		
1. demonstrate knowledge of the scientific and experience-based grounds, insight into current research and development work and in-depth knowledge of relevant theories and methods.	The literature study is well executed. Current research and development linked to the degree project is presented. The student's choice of method is well-founded, scientifically based, and evaluated against other methods. Relevant knowledge from the courses of the programme has been adequately applied. The work contains questions that are relevant to adolescent learning.	The literature study is inadequate. Links to current research and development are lacking or insufficient. Unsatisfactory justification for the chosen method or evaluation thereof. The work shows a lack of knowledge from previous courses in the programme. The work does not contain any questions that are relevant to adolescent learning.
2. demonstrate the ability to systematically search for, gather and integrate knowledge and identify their need for additional knowledge	The task of the degree project is handled independently and systematically based on critical analysis and synthesis of relevant literature. Carefully selected databases and search tools are used. Other relevant sources of knowledge are taken into account and the need for additional knowledge is discussed.	There is a significant lack of relevant literature, or it has not been integrated in the work. The work is not based on existing knowledge in the area. There is no discussion on development of the work.
3. demonstrate the ability to identify, analyse, assess and handle complex phenomena, questions and situations, even with limited information	Relevant complex phenomena, questions and situations are identified in the degree project. The work shows clearly that these have been handled and analysed well, despite the available information being limited. Assessments linked to the questions posed in the degree project and the findings from these are adequate.	Complex phenomena, questions or situations are not identified, handled or analysed in the degree project. The work shows the lack of a holistic approach to the problem, or is limited without motive so as to reduce the complexity of the task. There is a lack of relevant assessments linked to the questions posed in the degree project.
4. demonstrate the ability to plan and, with adequate methods, carry out skilled tasks within a given time frame and evaluate this work	The schedule drawn up at the start of the degree project has been followed. Skilled work is carried out within the time frame – and with the methods – agreed on. Any changes in the plan or the work are established via agreement between the student and supervisor. Assets and limitations in the work carried out are clearly defined.	The work is not of the standard initially set or, where applicable, the new standard agreed on. There is no critical evaluation of the student's own work. The agreed study plan has not been adhered to in terms of schedule and methodology.
5. demonstrate the capacity, both orally and in writing, in dialogue with different groups, to clearly account for and discuss their conclusions and the knowledge and arguments on which these are based	The report is well-organised, well-formulated linguistically and coherent. Good argumentation has been provided for the conclusions. The summary of sources is relevant, independently formulated and well integrated. Oral presentation and opposition, as well as communication during the course of the work, demonstrate the ability to present and, while being open to feedback, discuss the work and conclusions with various parties such as clients, supervisors, teachers, researchers and students.	The content is not presented systematically, and the text or the oral presentation is difficult to understand. The argumentation for the conclusions is inadequate. The summary has no clear direction, is too close to the source, or lacks coherence. The written report is not well formulated linguistically or coherent. The ongoing communication or the oral presentation do not demonstrate sensitivity, clarity or the ability to discuss the work.
6. demonstrate the ability to make assessments with regard to relevant scientific, social and ethical aspects	The degree project demonstrates assessment skills, such as being able to explain, justify, criticise and recommend. Relevant subject-related assessments with scientific grounds or proven experience have been made in the degree project. The degree project contains reflections on social and ethical aspects, where these are not deemed irrelevant.	Assessments are missing or inadequate. The work shows an inability to put the study in a broader context. The degree project does not address ethical or social aspects, despite the fact that these may be relevant to the project, or there is no justification for why these aspects were not addressed.
7. demonstrate the skills required to participate in research- and/or development work, in school or within similar educational activities	The student immerses themselves in the task very well and demonstrates the ability to participate in the work culture prevailing in the environment in which the task is to be performed. The student demonstrates the ability to test, evaluate and even reject ideas and solutions in discussions concerning the task. The student shows the capacity to take initiative and is open to supervision and criticism. The degree project is largely carried out independently.	Despite supervision and guidance, the student does not show the ability or willingness to participate and collaborate in the prevailing work culture. The student does not bring constructive ideas to discussions with supervisors and shows a lack of interest in advice and new suggestions. The student does not demonstrate creative work of their own between supervisions.