

This rubric is a sample provided by the Department of Building Services Engineering (PolyU)

Inception Design Report (weighted 30% towards the final subject grade) (Group assessment)

Criteria	Mastery Level in Grades*				
	F	D	C	B	A
<p>Integrated technology, structure, construction, and accommodation of services and integration among different services + Teamwork/collaboration/management (15% of Inception Design Report)</p> <p>This rubric is linked to programme outcomes: A2, A3, A4, A5, B1, B2, B3, B4</p>	Describe NO logic about how to accommodate and integrate services. Frequently works outside the team environment. Show no evidence of teamwork and division of tasks. Identify minimal collaboration with other team members.	Describe limited logic about how to accommodate and integrate services. Show little evidence of teamwork and/or produce very uneven distribution of work. Identify little collaboration with other team members.	Describe the logic about how to accommodate and integrate all services but with major missed items. Show some evidence of teamwork and division of tasks but with individual focus only. Identify collaboration with other team members. Works collaboratively most of the time.	Describe the logic about how to accommodate and integrate all services but with minor missed items. Show adequate evidence of teamwork and a fairly good division of tasks, with team members understand each other's role. Works and coordinates actively and well with others. Maintains good collaboration with other team members.	Describe the logic about how to accommodate and integrate ALL services without any missed items. Show clear evidence of teamwork and an equitable division of tasks, with team members understand each other's role. Works and coordinates constructively and effectively with others to help the team move forward. Maintains excellent collaboration with other team members.
<p>Summary of extent and scope of building services + Summary of design criteria, statutory requirements and the best design practices (15% of Inception Design Report)</p> <p>This rubric is linked to programme outcomes: A1, A2, A3, A4, B3</p>	Explain no summary of extent and scope of services. Does not attempt to or fails to identify and summarize the design criteria/requirements.	Explain limited summary of extent and state the scope of services. Summarizes the design criteria/requirements, though some aspects are incorrect or confused and key issues are neglected or glossed over.	Explain summary of extent and state the scope of services. Presents an adequate summary of the design criteria/requirements but tends to be at a superficial level.	Explain summary of extent and state the scope of services adequately. Shows some understanding of the different aspects of the design criteria/requirements.	Explain summary of extent and state the scope of services clearly and satisfactorily. Identifies the key design criteria/requirements clearly.
<p>System description, rationale for system selection and interfaces between all services (35% of Inception Design Report)</p> <p>This rubric is linked to programme outcomes: A2, A3, A4, B3, B4</p>	Fail to describe system information and characteristics. Explain no reasons for system selection and no interfaces between services.	Describe system information and characteristics inadequately. Explain reasons for system selection and interfaces between services inadequately.	Describe system information and characteristics, but there are gaps or unclear description. Explain reasons for system selection and interfaces between services adequately but there are some gaps or unclear descriptions.	Describe system information and characteristics adequately. Explain reasons for system selection and interfaces between services adequately, but with one or two gaps.	Describe system information and characteristics satisfactorily and clearly. Explain reasons for system selection and interfaces between services satisfactorily and clearly.

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<p>Visual communication (30% of Inception Design Report) This rubric is linked to programme outcomes: A2, A4, B3,</p>	<p>Fail to make use of the spaces for system design. Fail to illustrate system design in form of drawings. Fail to illustrate the plant room locations.</p>	<p>Make use of the spaces for system design that suits only part of the client's wants, with some key issues and/or constraints being overlooked. Illustrate system design in form of drawings but they provide insufficient information with major design errors. Illustrate the plant room layout inappropriately with design errors.</p>	<p>Make use of the spaces for system design that suits the client's wants, but some minor issues and/or constraints are overlooked. Illustrate system design in form of drawings that most of the information is sufficient with only minor design errors. Illustrate the plant room layout appropriately with only minor design errors.</p>	<p>Make good use of the spaces for system design that suits the client's wants, with only one or two minor issues being overlooked. Illustrate system design in form of drawings that provide sufficient, correct and appropriate information. Illustrate the plant room layout appropriately.</p>	<p>Maximize the usage of the spaces with thorough design that fits client's want as well as the business, structural, mechanical and electrical requirements. Illustrate system design in form of drawings that effectively provide sufficient, correct and appropriate information. Illustrate the plant room layout clearly.</p>
<p>Overall presentation, use of English and organization of the report (5% of Inception Design Report) This rubric is linked to programme outcomes: A4, B3</p>	<p>Incorrect use of English. Written English so poor as to be barely understandable. Many technical mistakes. Very poor overall presentation and organization of the report.</p>	<p>Poor use of English. Frequent problems with sentence construction. Frequent grammar, punctuation, and spelling errors. Report is not well-organized. Frequent problems with sentence construction.</p>	<p>Some grammar, punctuation and spelling errors. Written style wordy or repetitive, but sentence construction generally correct. Report is organized.</p>	<p>Written style is generally clear and readable. Grammar, punctuation and spelling are mostly correct. Report is well organized.</p>	<p>Written report is clear and readable, with conventions of grammar, punctuation and spelling adhered to consistently. Report is well-organized and has excellent and very clear overall presentation.</p>

**The qualitative criteria for broad grades (A, B, C, D, F) are described; the division into (for example) A+, B+, C+ etc. is at the discretion of the assessor/examiner.
A: Outstanding; B: Good; C: Satisfactory; D: Barely adequate; F: Inadequate*

Detailed Design Report (weighted 40% towards the final subject grade) (Individual assessment)

Criteria	Mastery Level in Grades*				
	F	D	C	B	A
<p>Integrated technology, structure, construction, and accommodation of services and integration among different services + Teamwork/collaboration/management (10% of Detailed Design Report) This rubric is linked to programme outcomes: A2, A3, A4, A5, B1, B2, B3, B4</p>	<p>Demonstrate NO accommodation of service equipment nor integration among different services. Show NO evidence of teamwork and division of tasks such that collaboration among team members is not observed.</p>	<p>Attempt to demonstrate the accommodation of service equipment as well as the integration and interface between different services, but provide hardly any useful information. Show little evidence of teamwork and/or very uneven distribution of work. Little collaboration among team members is observed.</p>	<p>Demonstrate the accommodation of service equipment as well as the integration and interface between different services, but with major missed items. Show some evidence of teamwork and division of tasks but with individual focus only. Maintains collaboration among team members. Works collaboratively most of the time.</p>	<p>Demonstrate the accommodation of service equipment as well as the integration and interface between different services, but with minor missed items. Show adequate evidence of teamwork and a fairly good division of tasks, with team members understand each other's role. Coordinates actively and maintains good collaboration among team members.</p>	<p>Demonstrate the accommodation of service equipment as well as the integration and interface between ALL different services without any missed items. Show clear evidence of teamwork and an equitable division of tasks, with team members understand each other's role. Coordinate effectively and maintains excellent collaboration among team members to help the team move forward.</p>
<p>Combined services drawings (15% of Detailed Design Report) This rubric is linked to programme outcomes: A2, A4, B2, B3</p>	<p>Show NO coordination and integration among different services by the use of combined services drawings. The drawings provide insufficient, incorrect and inappropriate system information. All combined services drawings are not to the appropriate scale and dimensioning.</p>	<p>Show little coordination and integration among different services by the use of combined services drawings that provide insufficient system information and some are incorrect/inappropriate. Some combined services drawings are not to the appropriate scale and dimensioning.</p>	<p>Show coordination and integration among different services by the use of combined services drawings that provide sufficient system information and most are correct and appropriate. Most combined services drawings are to the appropriate scale and dimensioning.</p>	<p>Show coordination and integration among different services by the use of combined services drawings that provide sufficient, correct and appropriate system information. Most combined services drawings are to the appropriate scale and dimensioning.</p>	<p>Show coordination and integration among different services by the use of combined services drawings that provide significantly sufficient, correct and appropriate system information. All combined services drawings are to the appropriate scale and dimensioning.</p>
<p>Summary of extent and scope of services + Summary of design criteria, statutory requirements and the best design practices (10% of Detailed Design Report) This rubric is linked to programme outcomes: A1, A2, A3, A4, B3</p>	<p>No summary of extent and scope of services. Does not attempt to or fails to identify and summarize the design criteria/requirements.</p>	<p>Limited summary of extent and scope of services are stated. Summarizes the design criteria/requirements, though some aspects are incorrect or confused and key issues are neglected or glossed over.</p>	<p>Summary of extent and scope of services are stated. Presents an adequate summary of the design criteria/requirements but tends to be at a superficial level.</p>	<p>Summary of extent and scope of services are well stated. Shows some understanding of the different aspects of the design criteria/requirements.</p>	<p>Summary of extent and scope of services are clearly stated. Identifies the key design criteria/requirements clearly.</p>

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<p>Detailed system description and rationale for system selection + (10% of Detailed Design Report)</p> <p>This rubric is linked to programme outcomes: A2, A3, A4, B3, B4</p>	Fail to describe detailed service system information. Fail to select service system with justification.	Attempt to describe detailed service system, but provide limited information. Select service system but with inadequate justification.	Describe detailed service system with adequate information. Select service system with adequate justification but there are some gaps or unclear descriptions.	Describe detailed service system with extensive information. Select service system with well explained and appropriate justification, but with one or two gaps.	Describe clearly the detailed service system with ALL the required information. Select services system accurately with clearly explained and strong justification.
<p>Detailed design calculation and equipment selections (20% of Detailed Design Report)</p> <p>This rubric is linked to programme outcomes: A2, B3</p>	Fail to provide any sizing estimation or design calculation for the equipment of the service system. Fail to convert calculation results into mathematical portrayal.	Use incorrect methods and data for sizing estimation and design calculation for the equipment of the service system such that calculations contain many significant errors. Mathematical portrayal of calculation results is inappropriate or inaccurate.	Use correct methods and data for sizing estimation and design calculation for the equipment of the service system but the calculation contains a few major errors. Mathematical portrayal of calculation results is only partially appropriate or accurate.	Use correct methods and data for sizing estimation and design calculation for the equipment of the service system but the calculation contains a few minor errors. Mathematical portrayal of calculation results is appropriate and accurate.	Use correct and accurate methods and data for sizing estimation and design calculation for the equipment of the service system. Mathematical portrayal of calculation results is insightful and accurate
<p>Visual communication (30% of Detailed Design Report)</p> <p>This rubric is linked to programme outcomes: A2, A4, B3, B4</p>	Drawings provided are not sufficient, correct and appropriate. All drawings are not to the appropriate scale and dimensioning.	Drawings provided are not sufficient and some are incorrect/inappropriate. Some drawings are not to the appropriate scale and dimensioning.	Drawings provided are sufficient and most are correct and appropriate. Most drawings are to the appropriate scale and dimensioning.	Drawings provided are sufficient, correct and appropriate. Most drawings are to the appropriate scale and dimensioning.	Drawings provided are significantly sufficient, correct and appropriate. All drawings are to the appropriate scale and dimensioning.
<p>Overall presentation, use of English and organization of the report (5% of Detailed Design Report)</p> <p>This rubric is linked to programme outcomes: A4, B3</p>	Very poor overall presentation and organization of the report. Incorrect use of English. Written English so poor as to be barely understandable.	Report is not well-organized. Poor use of English. Frequent problems with sentence construction. Frequent grammar, punctuation, and spelling errors.	Report is organized but has many grammar, punctuation and spelling errors. Written style wordy or repetitive, but sentence construction generally correct.	Report is well organized but has minor grammar, punctuation and spelling mistakes. Written style is generally clear and readable.	Report is well-organized and has excellent and very clear overall presentation. Written report is clear and readable, with conventions of grammar, punctuation and spelling adhered to consistently.

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