

Self-Inspection Report

Volume II: Quoted Reference and Evidential Material

Programs

Leading to Bachelor's Degree

Applicable in the year 2008

The original text of "Self-Inspection Report Volume II" is written in Japanese.
This is English translation of the original text.

Name of Applicant Institution

Name of program in Japanese

(Program Field)

Program Title

Types of Examination:

Initial Examination/ Examination for Continuous Accreditation/ Interim Examination

<p>Note: In a case of Interim Examination, fill in about "Inspection items notified by JABEE at previous Examination" only.</p>

Filing Date: Month, Date, 2008

Content

(A Color paper is to be inserted as index between each batch of the following inspection items comprising quoted reference and evidential material thereof. Name of an inspection item (e.g. "1 Criterion 1: Establishment and Disclosure of Learning and Educational Objectives", "3.2 Educational methods", etc) is to be mentioned on the face of the color paper. Each of the quoted reference and evidential material is to be numbered serially in each batch of an inspection item.)

Program Information

- (1) Name of Applicant Institution in Japanese and in English**
- (2) Name of the Program [in Japanese](#)**
- (3) Program Title (Program Discipline)**
- (4) Name of the Academic Degree to be Awarded**
- (5) Contact Information**
- (6) Numeric Data related to the Program**

Outline of the Program

Examination Result during the last five years

A copy of the Report of Examination Result sent by JABEE to the program during the last five years. In a case of Initial Examination, this item is not necessary.

Issues improved and /or modified comparing with the status at the previous examination

Results of Self-Inspection

1. Criterion 1: Establishment and Disclosure of Learning and Educational Objectives

1-1, Name of quoted reference and evidential material

2. Criterion 2: Quantitative Curriculum Requirements

2-1, Name of quoted reference and evidential material

3. Criterion 3: Educational Methods

3.1. Admission and Enrollment

3.1-1, Name of quoted reference and evidential material

3.2. Educational Methods

3.2-1, Name of quoted reference and evidential material

3.3. Educational Organization

3.3-1, Name of quoted reference and evidential material

4. Criterion 4: Educational Environment

4.1. Facilities and Equipment

4.1-1, Name of quoted reference and evidential material

4.2. Financial Resources

4.2-1, Name of quoted reference and evidential material

4.3. Student Support System

4.3-1, Name of quoted reference and evidential material

5. Criterion 5: Evaluation of Students' Level of Achievement against the Learning and Educational Objectives

5-1, Name of quoted reference and evidential material

6. Criterion 6: Educational Improvement

6.1. Educational Feedback System

6.1-1, Name of quoted reference and evidential material

6.2. Continuous Improvement

6.2-1, Name of quoted reference and evidential material

7. Program Criteria by Field

Attachment : Personal Data of Faculty Member

List of Quoted Reference and Evidential Material
which will be displayed during the on-site Visit

(The names of the evidential material 1,2,3 in the following are examples.)

Number	Name of quoted reference and evidential material
1	Graduation Thesis
2	Grade Transcript and related material of Mathematics
3	Grade Transcript and related material of Physics

1. Program Information

(1) Name of Applicant Institution in Japanese and in English

(2) Name of the Program in Japanese

(3) Program Title (Program Discipline)

(4) Name of the Academic Degree to be Awarded

(5) Contact Information

- Name of the program officer
Affiliation and position
Postal code
Address
Telephone number
Fax number
E-mail address

- Name of representative liaising with JABEE
Affiliation and position
Postal code
Address
Telephone number
Fax number
E-mail address

(6) Numeric Data related to the Program

Name of Program						
(Preferably for the Past Five Years)						
Year						
Student Number Information						
No. of total student in the faculty (A)						
If the program belongs to a department or a course	No. of enrollees in the department /course in the year (B-1)					
	Fixed number of the department /course in the year (B-2)					
	Capacity for applicants (Fixed No. of the dept. – No. of nominated enrollees) (B-3)					
No. of enrollees in the program in the year (C-1)						
Fixed number of the program in the year (C-2)						
No. of students transferred from other programs (D-1)						
No. of students transferred from other institutions (D-2)						
Total No. of students registered in the program (E)						
No. of graduates of the program (F)						
Faculty Number Information						
No. of full-time faculty of the program (H-1)						
No. of part-time faculty of the program (H-2)						
No. of teaching assistants of the program (H-3)						
No. of other educational assistants (H-4)						
Curriculum Information						
No. of full hours per one credit unit (*Total Number of hours) unit: hour (J)		Lectures	Practice Exercise	Laboratory Works	Others	(Designing etc.)
Average No. of hours taken for students' self-study Unit: hour (K)						
No. of credit units required for graduation (L-1)						
No. of credit units for study in the field of specialization (L-2)						
No. of credit units of basic subjects for study in the field of specialization (mathematics, natural science, information, etc.) (L-3)						
No. of credit units for language subjects (L-4)						
No. of credit units for general education subjects except language subjects (L-5)						

(No. of credit units for study in the field of specialization) / (No. of credit units required for graduation) (M-1)	
[No. of credit units for basic subjects for study in the field of specialization (mathematics, natural science, information, etc.)] / (No. of credit units required for graduation) (M-2)	
(No. of credit units for language subjects) / (No. of credit units required for graduation) (M-3)	
(No. of credit units for general education subjects except language subjects) / (No. of credit units required for graduation) (M-4)	
Facilities Information	
Area of students' laboratories and practice exercise (m ²) (N-1)	
Average number of students in one group and area occupied by one group in the above (N-2)	Number of students m²

*Each item is to be filled in to the extent possible. If a supplementary explanation is necessary, it can be written in the margin.

Results of Self-Inspection

1. Criterion 1: Establishment and Disclosure of Learning and Educational Objectives

(1) Establishment and Disclosure of Learning and Educational Objectives

Table 2 Corresponding Relationship between Learning and Educational Objectives and the Knowledge and Abilities Outlined in Items from (a) to (h), Criterion 1

Mark ⊙ when each of learning and educational objectives [(A), (B), (C) - - -] subjectively include knowledge and capability [(a) ~ (h)] of Criterion1 (1), and mark ○ when collaterally include.

Knowledge and Abilities of Criterion 1(1)	(a)	(b)	(c)	(d)			---	(e)	(f)	(g)	(h)
				(1)	(2)	(3)					
Learning and Educational Objectives											
(A)											
(B)											
(C)							---				
(D)											
(E)											

(A)
(B)
(C)
(D)
|
|
|

} : Enter the learning and educational objectives for each program.

- (a) An ability and intellectual foundation to consider issues from a global and multilateral viewpoint.
- (b) Understanding of the effects and impacts of engineering on society and nature, and of engineers' social responsibilities (engineering ethics)
- (c) Knowledge of mathematics, natural sciences and information technology, and an ability to apply such knowledge.
- (d) Specialized engineering knowledge in each applicable field, and an ability to apply such knowledge to provide solutions to actual problems
- (e) Design ability to organize comprehensive solutions to societal needs by exploiting various disciplines of science, engineering and information.
- (f) Japanese-language communication skills including methodical writing, verbal presentation and debate abilities, as well as basic skills for international communication.
- (g) An ability to carry on learning on an independent and sustainable basis.
- (h) An ability to implement and organize works systematically under given constraints.

(d) $\left\{ \begin{array}{c} (1) \\ (2) \\ (3) \\ | \\ | \\ | \end{array} \right\}$: Enter knowledge and capabilities required by program criteria by field. Here shows an example of indication method (d) in the Table. It can be amended depending on the field.

Table 3 Learning and Educational Objectives and Evaluation Methods

Learning and Educational Objectives		Related Items (a)-(h) of Criterion 1(1)	Evaluation Methods	Remarks
(A) Design Ability	Develop a design specification taking account of customers' needs and constraints.	(e) (b) (a)	In a class of "XXX project", a task to develop a design specification addressing customer's order is given. A report is to be presented with a theme of "on what concept the design specification is develop". The content of the report is evaluated.	
	Contrive plural solutions to satisfy design specification. Evaluate each solution and choose an appropriate solution to develop conceptual design.	(e) (b)	In a class of "XXX project", students develop conceptual design to satisfy a given design specification. Students compare the results of their conceptual designs then choose a best one. A report is to be presented on this comparative result and ground of evaluation. The content of the report is evaluated.	
	Develop a detailed design utilizing appropriate design tools and methodologies.	(e) (d)	In a class of "XXX design", students develop a design for a specified object. A report is to be presented on this result. The content of the report is evaluated.	
	<div data-bbox="392 957 795 1252" style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0ffe0;"> <p>Describe in detail "What performance and to what extent students shall achieve".</p> </div>	<div data-bbox="884 957 1209 1268" style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0ffe0;"> <p>Cite related items (a) - (h) of Criterion 1(1) in order of degree of relation.</p> </div>	<div data-bbox="1254 813 1724 1268" style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0ffe0;"> <p>Clarify points of evaluation and concrete evaluation methods. When multiple evaluation methods are applied, describe the ratio of weighting for each method.</p> </div>	<div data-bbox="1780 885 2072 1244" style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e0ffe0;"> <p>Special note if any. (e.g.) Particular evaluation method.</p> </div>
(B)				

(2) Consideration of such Factors as Tradition, Resources of the Institution as well as the Fields in which its Graduates are Particularly Active, and to Social Needs and Student's requirements

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2. Criterion 2: Quantitative Curriculum Requirements

(1) Requirements for Graduation

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(2) Contact Hours

----- New Page -----

Table 4 Contact Hours for each Subjects and the Extent of Adhesion to each of the Learning and Educational Objectives

Titles of Subjects	Number of Credits	Compulsory or Elective	Grade and Term	Lecture, Practice Exercise, Laboratory Works or Graduation Theses	Number of Total Hours (hour)	Contact Hours(hour)*1										The Extent of Adhesion to each Learning and Educational Objectives ³				
						Category of Learning Contents						The Form of Education provided								
						Humanities, Social Sciences and Language Studies	Mathematics, Natural Sciences and Information Technology	Study in the Field of Specialization ²					Lectures	Practice Exercise	Laboratory Works	Others	(A)	(B)	(C)
								(1)	(2)	(3)	(4)	Others								
(Example) An outline of Physical Engineering	2	Compulsory	1-I	Lecture & Practice Exercise	22.5		22.5						15	7.5			⊙	○		
- - - -																				
Graduation Thesis	5	Compulsory	4-II	Research	400				200	150	50	400			300*4	100*4	⊙	○	⊙	
- - -																				

*1 Enter the number of full hours (a full hour comprises 60 minutes) for the contact hours. Entered numbers are examples.
 *2 As an example, a case where there are four criteria (1) ~ (4) concerning the discipline defined by the program criteria by field.
 *3 Show the extent of adhesion to each of the learning and educational objectives by marking double circles ⊙ to show strong adhesion, while a single circle ○ to show weak adhesion.
 (Note) If the program provides the subjects falling into the categories that are described in Section 5.2 of “Procedures and Method of Examination and Accreditation”, as (P) lectures at other universities, etc.; (Q) internship, etc.; (R) lectures, etc. provided via videograms, Internet, the University of the Air, etc. as part of the curriculum prepared by instructors, but not allowing any questions from students; (S) Internet-based practice exercise allowing questions from students; and (T) study tour led by instructors, etc., indicate so in the column showing the form of education provided, like “lecture, practice exercise, laboratory works or graduating theses , etc.” by using the symbols “P,Q,R,S,T” above.
 *4 In case it is difficult to allocate the hours into the four forms of “Lecture”, “Practice Exercise”, “Laboratory”, and “Others”, it is not necessary to enter here.

Table 5 Contact Hours and Subdivided Category Thereof

Learning Category		Contact Hours					
		Total Hours of Compulsory and Elective Subjects	Lecture *	Practice Exercise*	Laboratory Works*	Others *	
The Humanities and Social Sciences, etc (Including Language Studies)	Compulsory						
	Elective						
	Total						
Mathematics, Natural Sciences and Information Technology	Compulsory						
	Elective						
	Total						
Study in the Field of Specialization	(1)	Compulsory					
		Elective					
		Total					
	(2)	Compulsory					
		Elective					
		Total					
	(3)	Compulsory					
		Elective					
		Total					
	(4)	Compulsory					
		Elective					
		Total					
	Others	Compulsory					
		Elective					
		Total					
	Total						
	Total	Compulsory					
		Elective					
		Total					

*Enter the number of hours totaled with respect to the subjects for which "Number of Total Hours" can be allocated into the four forms of education, namely "Lecture", "Practice Exercise", "Laboratory Works", and "Others" in "Table 4".

3. Criterion 3: Educational Methods

3.1. Admission and Enrollment

(1) Method for Selecting and Admitting of Students and its Disclosure / Implementation

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(2) Concrete Methods for Selecting Student and its Disclosure / Implementation

----- New Page -----

(3) Admission Methods and Criteria for Transferred Students and its Disclosure /Implementation

----- New Page -----

2.3.2. Educational Methods

(1) Curriculum Design Policy and its Disclosure

Table 6 Curriculum Map to Achieve the learning and Educational Objectives

Learning and Educational Objectives	Name of Subjects							
	1 st grade		2 nd grade		3 rd grade		4 th grade	
	1 st term	2 nd term	1 st term	2 nd term	1 st term	2 nd term	1 st term	2 nd term
(A)	Subject A Subject B Subject C	Subject D Subject E (○)	Subject F (◎)	Subject G (○)		Subject H (◎)		Subject I (◎)
(B)				Subject J		Subject H (○) Subject K (◎)		Subject L (◎) Subject M
(C)	Subject A	Subject D Subject N	Subject O (◎) Subject P (◎)	Subject R (◎)	Subject T Subject U	Subject S (◎) Subject V (◎)		Subject W (◎)
			Subject Q	Subject G				

(2)Preparation and Display of Syllabi / Implementation of Education according to Syllabi

----- New Page -----

(3) A System that Enhances Students' Understanding of Class Work and other Activities and its Disclosure /Implementation

----- New Page -----

(4) Students' Assessment by themselves of their own Level of Achievement

----- New Page -----

3.3. Educational Organization

(1) Quantity and Quality of Faculty Members as well as an Educational Support System

----- New Page -----

Table 7 List of Faculty Members

Name	Age	Position	Highest Degree Obtained (Obtained Year)	Status of Employment* ¹ (Full-time, Part-time, serve concurrently)	Years of experience in				Registered Engineer? If Yes, Provide the Title and Year (AD) of Registration	Subjects in Charge ²
					Industry	Public Institution	Other Institution of Education and/or Research	Current University		

*1 : In case of part-time employment, provide annual working hours in parentheses

*2 : Enter all subjects in charge at the four year undergraduate programs, junior colleges or colleges of technology having advanced courses

Table 8 Activity Status of all Faculty Members

Name of Faculty Member	Position	Subjects in Charge ^{*1} (Department of Undergraduate or Postgraduate, Grade, Term, Number of Credit Units, Number of Faculty Members in Charge Sharing the Subject)	Activity Status ^{*2} (By percentage)		
			Education	Research	Others ^{*3}

*1 : This item is to determine if faculty member's workload is reasonable or not. Enter all subjects in charge at undergraduate and postgraduate.

Describe as: Fluid Dynamics (2nd grade of undergraduate, third term, 2 credit units, 1 person) and Mechanical Engineering (1st grade of master course, first term, 2 credit units, 2 persons).

*2 : Provide details of working hours by percentage, without including sleeping time, mealtime, commuting time and break, so that the total may be 100%. Rough amount is acceptable.

*3 : Here mainly includes activities for management and administration of educational institution or social activities

(2) Display and Implementation of a Faculty Development (FD) System Designed to Improve the Quality of Faculty

----- New Page -----

(3) The Evaluation Methods to Determine the Educational Contribution of each Faculty Member and its Display and Implementation

----- New Page -----

(4) An Intra-faculty liaison Network System to Ensure Closer Coordination between the Course Subjects within the Curriculum and to Enhance and Improve the Effectiveness of the Program and its Display and Implementation

4. Criterion 4: Educational Environment

4.1. Facilities and Equipment

(1) Classrooms, Laboratories, Practice Rooms, Libraries, IT Facilities, Study Rooms, Rest Areas, Cafeterias, and other relevant Facilities and Equipment

----- New Page -----

4.2. Financial Resources

(1) Endeavor to Secure Adequate Financial Resources to Provide, Maintain and Operate the Facilities and Equipment

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4.3. Student Support System

(1) A system concerned the Educational Environment that Promotes Students' Enthusiasm to Learn while attending to their Requests

----- New Page -----

5. Criterion 5: Evaluation of Students' Level of Achievement against the Learning and Educational Objectives

(1) The Objectives Achievement Level by Subject

Table 9 Evaluation Methods and Criteria that Apply to Main Subjects Necessary for Achieving the Learning and Educational Objectives

Name of Main Subjects (Include subjects at least those marked with a double circle in the Table 6)	Performance Criteria for Each Subject	Evaluation Methods and Criteria
xxx Engineering	Understand the meaning of basic technical words relating to XXX engineering. Understand "XXX law" and apply this law to simple XXX analysis. In XXX design, explain the trade-off relationship between A and B. On an apparatus applying XXX principle, prepare the outline of its operation with showing its design drawing. Explain the social role played by XXX engineering according to the	
xxx Engineering Laboratory Works	Acquire basic operation instructions of XXX. Utilize XXX to monitor YYY. In XXX engineering, plan basic laboratory work, and draft necessary equipment configuration and procedure manual. Study the observational data, and explain the relevance to the fundamental principles of XXX engineering. Based on the observation data, plot a graph effectively to figure out the phenomenon. Make an effective presentation on the result of laboratory works and study's findings.	

Transcribe the abstract of description in Syllabi to show "What performance and to what extent students shall achieve".

For each "Performance Criteria for Each Subject", transcribe the abstract of description in Syllabi to clarify concrete evaluation methods and the ratio of weighting for respective subjects.

(2) Methods and Criteria for Evaluating Credits Earned by the Students at other Institutions or by the Transferred Students and its Implementation

----- New Page -----

(3) Methods and Criteria for Comprehensively Evaluating the Level of Students' Achievement against each Learning and Educational Objective of the Program and its Implementation

----- New Page -----

(4) To Explain if all the Program Graduates Achieve the Entire Program's Learning and Educational Objectives

6. Criterion 6: Educational Improvement

6.1. Educational Feedback System

(1) Educational Feedback System that examines the program in accordance with Criteria 1-5 on the bases of the results of evaluation regarding the level of student achievement against the leaning and educational objectives and its Display and Implementation

----- New Page -----

(2) Establishment and Implementation of a mechanism to check the Societal Needs and Students' Requests as well as to check the functions of the educational feedback system itself.

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(3) Display of Regular Activities Records such as Meetings of Boards and Committees, etc. within the Educational Feedback System

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6.2. Continuous Improvement

(1) A System that Continuously Improves the program in accordance with Criteria 1-6 on the basis of Educational Feedback

2.7. Program Criteria by Field

The inspection items of “Program Criteria by Field” and explanations thereof

Inspection item of Program Criteria by Fields	Related items of Criteria 1-6	Corresponding pages in Self-Inspection Report Volume I	Corresponding quoted reference and evidential material in Self-Inspection Report Volume II	Corresponding quoted reference and evidential material displayed during the on-site visit
(As examples) (1)(a)	Criterion 1(1)(d)	Page xx -xx	Table 2 & 3 Schedule 1	Schedule xx
	Criterion 3(1),(2)	Page xx,xx,xx	Schedule 2	Schedule xx
	Criterion 5(1),(3)	Page xx		Schedule xx
(1)(b)				
(1)(c)				

Attachment: Personal Data of Faculty Member

- 1. Name (Age):**
- 2. Affiliation and Position:**
- 3. Highest Degree Obtained (Obtained Year):**
- 4. Status of Employment** (Full-time, serve concurrently, or Part-time. In case Part-time employment, provide annual working hours):

5. Subjects in Charge

5.1 Subjects in Charge for the program concerned

subject	grade	term	Number of credit units	Number of faculty members in charge including yourself

5.2 Subjects in charge for other programs

subject	grade	term	Number of credit units	Number of faculty members in charge including yourself

6. Aptitude for teaching the subjects

The following items i.e., Educational experience, Research experience, Business experience, Academic Paper, Reviews, Exponents, etc., Books, Involved Projects, and Patent, are required to judge whether the subject in charge is appropriate to this faculty. To briefly describe providing Examples in each subject.

Subject 1:

Subject 2:

7. Educating Activities (Educational Improvement, lucubration, academic activities and etc.)

8. Years of Experience:

Category of business	Years of Experience
Industry	years
Public Institution	years
Institution of Research	years
Other institution of Education	years
Current Institution	years
Total	years

9. Years of Actual Business Experience (if you have)

Category of Business	Job Content	Years of Experience
		years
		years

10. Registered Engineer? If Yes, Provide the title and Year of Registration:

11. Activity status

Education : %

Research : %

Others* : %

* Here mainly includes activities for management and administration of educational institution or social activities. Provide the details of working hours by percentage (Not including sleeping time, mealtime, commuting time, and break) so that the total may be 100%. Rough amount is acceptable.

12. Others to be noted