

Procedures and Methods of Examination and Accreditation

Programs leading to Bachelor's Degree

Applicable in the year 2008

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Procedures and Methods of Examination and Accreditation Programs Leading to Bachelor's Degree

Applicable in the year 2008

1. Introduction

This document, entitled "Procedures and Methods of Examination and Accreditation," sets forth the basic policies, procedures and methods of the accreditation and the examination of engineering education programs (hereafter referred to as the programs), conducted by the Japan Accreditation Board for Engineering Education (hereafter referred to as JABEE) in accordance with Criteria for Accrediting Japanese Engineering Education Programs (hereafter referred to as the Accreditation Criteria), which is established under the Article 4 of the Constitution of the JABEE. It contains information necessary for those taking part in the accreditation and examination process. The contents of this document should also help a Program Operating Body at the institution of higher education (hereafter referred to as the Program Operation Body) seeking to have their programs accredited in their preparation for the examination. The Program Operating Body shall comply with their responsibilities described in this document.

In regard to matters not set forth in Accreditation Criteria nor Procedures and Methods of Accreditation and Examination, those are set up separately by JABEE.

2. Objective, Scope, and Term of Validity of Accreditation

2.1. Objective of Accreditation

JABEE provides program accreditation for the following four purposes.

- (1) Assuring the quality of engineering education. That is, providing the public with the information regarding which basic educational programs for engineers are accredited by JABEE, thus ensuring that the graduates of an accredited program meet learning and educational objectives established by each program.
- (2) Promoting the introduction of excellent educational methods and continuously improving engineering education.
- (3) Developing the methods of evaluating engineering education, while fostering experts in the evaluation of engineering education.
- (4) Clarifying organizational responsibility and the role of individual faculties in the educational activities, while promoting proper evaluation of each faculty's educational contribution.

2.2. Scope of Accreditation

Programs within the scope of JABEE accreditation are those provided by four-year undergraduate education in the universities approved by the authorities (Those programs that provide two additional years of advanced training on top of the general polytechnic and junior college education are also within the scope). As far as the contents of a program focus on the basic engineering education, it does not matter which faculty within the university officially provides the program.

JABEE will not accept applications for such a program if the criteria for completing the program are different from those for graduating from the department, when one department provides one program (in this case, the department is regarded as the Program Operating Body). Where a program desires to be accredited in multiple disciplines, the program is subject to examinations in respective disciplines. As for examination procedures for such a program, refer to 4.8.2 Procedures for Multiple Disciplines Examination.

2.3. Methods of Accreditation

Accreditation is decided based on the results of examination whether or not the program satisfies the Accreditation Criteria.

JABEE examines the programs applied by the Program Operating Bodies, and accredits the programs that satisfy all of the Accreditation Criteria. For this process, JABEE commissions either single or joint engineering societies and/or associations (hereafter referred to as the Engineering Societies), that are regular members of JABEE to send out an examination team. The main Engineering Societies those send out examination teams are called Examination Team Dispatching Organizations (hereafter referred to as Team Dispatching Organizations). The examination team studies the contents of the Self-Inspection Report submitted by the program, and then verifies the factual basis of the Self-Inspection Report by conducting On-site Visit, to determine whether or not the applied program satisfies all of the Accreditation Criteria. The results of the examination by examination teams in a discipline are reviewed and coordinated to adjust between programs in each Discipline-Based Examination Committee in the appointed engineering societies and then further coordinated among disciplines in the JABEE Coordinating Committee of Examination and Accreditation (hereafter referred to as the Coordinating Committee). Based on the results established by this process, the Coordinating Committee prepares a draft of the decision whether or not to grant accreditation, which is further reviewed and finalized by the Accreditation Commission, to be officially approved by the JABEE Board of Directors. The JABEE Board of Directors will be legally responsible for the accreditation decision and examination results.

Incidentally the Discipline-Based Examination Committee is established by each of the Team Dispatching Organizations in relevant disciplines, and is in charge of reviewing and coordinating examinations in the discipline, while their organizations and operations follow the rule and procedures as provided separately.

Considering the confidential nature of the examination and accreditation, the relevant information will not be disclosed by concerned parties. The details of methods and terms of information control are set up separately.

2.4 Examination Methods, Items and Reporting of Results

Examination is conducted in point of inspection items (hereafter referred to as Inspection Items) through the examination of the Self-Inspection Report provided by the institution and On-site Visit (hereafter referred to as General Examination), in principle. Depending on the purpose of examination (refer to 2.7), there are cases where the examination is conducted through the examination of the Self-Inspection Report without the On-site Visit (hereafter referred to as Documentary Examination). There are other cases where not all inspection items are checked out but only specified items are examined.

Through an examination “To which extent the program satisfies the Accreditation Criteria” is examined. Program Inspection Report provides a record of the examination results. Rating scheme in Program Inspection Report is as follows:

- (1) Acceptable (Record with the letter “A” in the column of “Ratings” for each of the inspection items in the Program Inspection Reports)
Satisfying the Accreditation Criterion
- (2) Concern (Recorded with the letter “C” in the column of “Ratings” for each of inspection items in the Program Inspection Reports)
Satisfying the Accreditation Criterion at the moment, this item can benefit from some improvement, hence action of certain kind will be desirable for the program to continue to fully meet the Accreditation Criteria.
- (3) Weaknesses (Recorded with the letter “W” in the column of “Ratings” for each of Inspection Items in the Program Inspection Reports)
Although this item almost satisfies the Accreditation Criteria at the moment, the degree of its compliance is so weak that the item necessitates some improvement. Certain kind of action is needed to reinforce the item’s degree of compliance. It is necessary to examine the measures for improvement without waiting for the six-year term of validity (for example three years later).
- (4) Deficiency (Recorded with the letter “D” in the column of “Rating” for each of inspection Items in the Program Inspection Reports)
The item fails to satisfy the Accreditation Criteria. Thus the program is not deemed to comply with the Accreditation Criteria.

When there are some Inspection Items not to be examined, these Inspection Items are recorded with minus sign “-” in the designated columns.

2.5. Accreditation Decision and Scope of Publication

Accreditation decisions are made on the basis of the examination results.

2.5.1. Accreditation Decision

A program, which is determined as “non-defective” for all inspection items as a result of the decision by the Coordinating Committee (refer 2.3), is regarded as satisfying all of the Accreditation Criteria. The program is determined as “Accredited”.

A program, which is determined as “deficiency” for one or more Inspection Items as a result of the decision by the Coordinating Committee (refer 2.3), is determined as “not accredited”.

2.5.2. Publication of Accredited Programs

JABEE announces to the public the current accredited programs with their program title and commencement year of accreditation. JABEE shall not announce to the public any information that identifies programs not accredited.

2.6. Term of Validity of Accreditation Status and Programs’ Responsibilities

2.6.1. Term of Validity of Accreditation Status

Term of validity of accreditation status is, in principle, for six years. Those who graduate from a program during the six years started from the year in which the examination of the program is successfully completed are certificated as graduates of accredited programs. The program titles of accredited programs are announced to the public over that period of six years. When it is determined by JABEE, however, that it is difficult to grant accreditation for six years because

the degree of its compliance with Accreditation Criteria is so weak, the term of validity is shortened. Reasons for shortened term of validity may include: Inconstancy in the level of achievement of learning and educational objectives; financial instability; uncertainty arising out of administrative, operational or organizational problems; faculty, facilities or equipment in need of reinforcement or improvement; major changes such as introduction of new curriculum or modification to the current curriculum; excessive dependence on specific faculty members; etc. It aims to encourage the program's improvement.

2.6.2. Maintenance of Accreditation Status

Programs during the term of validity of accreditation status must submit a notification of continuation of the accreditation status before the appointed date, together with accreditation maintenance fee as scheduled separately. In case a program does not submit the notification before the appointed date, the term of validity of accreditation status for this program is due to expire on the day after the appointed date.

2.6.3. Renewals of Accreditation Status after the term of validity

To continue the accreditation status, the program must be reexamined to be accredited again within the year that follows the final year of the term of validity of accreditation status.

2.6.4. Changes during the Term of Validity of Accreditation Status

In case there are changes to any items relevant to Accreditation Criteria (such as program title, learning and educational objectives, quantitative curriculum requirements, educational methods, educational environment, or educational improvements) during the term of validity of accreditation status, and the changes are considered so significant whether the programs is substantially equivalent before and after the change, the program must notify JABEE in writing of such changes. This notice is called "notice of changes" and reference to the guideline to the notice of changes is set separately.

2.7. Types of Examinations, Term of Validity of Accreditation Status, and Types of Subsequent Examinations to continue Accreditation Status

Examinations of the following types are generally conducted - Initial Examination, Interim Examination, Examination for continuous accreditation, Re-visit, and Examination of Changes. (The Inspection Items for each examination shall be in accordance with Section 4.4.1.). The previous examination of accredited program shall be called Previous Examination. Accreditation Commission is responsible for accreditation decision for all types of examinations based on the results of review and coordination of examinations at the Coordinating Committee.

2.7.1. Initial Examination

If a program in question has not been accredited at the time of its application, the examination it undergoes is called Initial Examination.

For an Initial Examination, if the ratings of the inspection items include only "acceptable" or "concern", full accreditation shall be granted, as a rule, for a term of six years. In order to renew the accreditation status, the program must undergo an examination for continuous accreditation within the year following the final year of the term of validity.

If the ratings for inspection items include any "weakness", accreditation shall be granted but the term of validity is shortened, normally for a term of three years. In order to continue the accreditation status, the program must undergo an Interim Examination within the year following the final year of the term of validity.

If ratings for the inspection items contain any “deficiency”, the program shall not be accredited.

2.7.2. Interim Examination

If a program has been accredited for a shortened term of validity, the program undergoes Interim Examination to maintain its accredited status within the year following the term of validity (normally three years).

There are two types of procedures in the Interim Examination: one is conducted only by documentary examination; and the other is followed by On-site Visit. When JABEE notifies a Program Operating Body that the program has been accredited for a shortened term of validity, it shall also notify of inspection items for the next Interim Examination and of the types of procedure (documentary examination or general examination).

For Interim Examination, if the examination results for inspection items do not contain any weaknesses or deficiencies, the accreditation is extended to a total of six years from the time of previous general examination. In other words, if the program has been accredited for three years by previous examination, the accreditation can be extended for another three years.

If the examination results for the inspection items do include any weaknesses or deficiencies, the program shall not be accredited. In that case, the term of validity shall be ended at the end of the year preceding the year in which the Interim Examination was conducted.

2.7.3. Examination for Continuous Accreditation

Currently accredited programs (with six-year term of validity) can continue to be accredited by successfully undergoing another examination within the year following the last year of the term of validity. This is called as Examination for Continuous Accreditation. It is carried out in accordance with the purpose outlined in “2.1. Objective of Accreditation”, that is, “continuously developing engineering education”. A viewpoint of continuous improvement of the program is emphasized. Any items that were pointed out at the previous examination are duly focused with special attention. Accreditation decision as well as the term of validity of accreditation is the same as that of initial examination. In case one or more inspection items are regarded as “deficiency”, re-examination may be conducted in the following year of the Examination for Continuous Accreditation (Refer 4.6.2).

2.7.4. Examination of Program Changes

If an accredited program (regardless of the term of validity) affected by significant changes in items relevant to program contents or to the Accreditation Criteria and it is deemed difficulties maintaining its current accreditation status until the next Examination for Continuous Accreditation, an examination undertaken to the discretion of JABEE is called an ‘Examination of Changes’.

If a program is affected significantly by any changes and deemed the submission of notices of change, the Program Operating Body of the program must submit it to JABEE without delay according to the Guidelines for Submission which is prescribed separately. On the other hand, even in the absence of the notice of changes, if JABEE has a good reason to believe that there was a significant change in the program it may ask the program to explain the circumstances and may take necessary measures such as conducting Examination of Changes at its discretion.

In the examination of changes, the accreditation decision and the accreditation term of validity shall be handled in the same manner as in the Initial Examination. However, if the examination results for the inspection items include any deficiencies, a Re-examination in the following may be carried out. The current accreditation status of the program remains valid until the decision of the Examination of Changes is made.

2.7.5. Re-examination

If any deficiencies are found in a program at an Examination for Continuous Accreditation or an Examination of Changes, and if the Coordinating Committee judges that a Re-examination is necessary, Re-examination will be conducted a year later. If deficiencies are found still remaining in the program through the Re-examination, the program will lose its accreditation status. On the other hand, if no deficiency is found, accreditation shall be granted for a shortened term of validity of three years, including the year in which application was made for the Examination for Continuous Accreditation. In this case, the program needs to undergo another Interim Examination two years after the Re-examination. The program is considered to remain accredited until the accreditation is denied by Re-examination.

3. Basic Policies of Accreditation and Examination

The following six items comprise the basic policies that underlie the accreditation and examination of engineering programs.

(1) Accreditation and examination is conducted by determining whether or not a program meets the Accreditation Criteria, with examining the Self-Inspection Report filled by the applicant program as well as On-site Visit. Self-Inspection Report is very important document because it helps the applicant Institution to explain how the program satisfies the Accreditation Criteria, with arrangement and analysis of evidential materials, and should therefore be formulated so as to be easily understood by the examiners. The provided evidential materials are enough to prove that the rules and systems for the program are working effectively, and they could basically include whatever the Program Operating Body deems it necessary to submit.

In the On-site Visit of the general examination, examination is implemented especially focused on the items which cannot be confirmed or which are difficult to obtain evidences within a Self-Inspection Report. (Refer to Section 6. On-site Visits)

(2) The following four points are crucial in the process of examination:

- [a] Does the program set up appropriate learning and educational objectives that show the ensured level of knowledge and abilities of its graduates?
- [b] Is the program delivered as described in the Self-Inspection Report, school regulations, syllabi, pamphlets, etc?
- [c] Do the graduates of the program achieve the knowledge and abilities set forth in the objectives of the program and at the levels expected by engineering and industrial communities?
- [d] Is the system for continuous improvement of the program working?

(3) To respect the individuality of the program

(4) To encourage Program Operating Body to improve the program

(5) When an inspection item is believed to have already been adequately examined by a third-party agency, the reference materials from that examination could be accepted

(6) Accreditation and examination shall be carried out fairly. The examiners shall respect and follow the Code of Ethics for Examiners as set up separately. All related documents and information shall be handled following the Guideline for Documents Control provided separately, considering the confidential nature of the examination.

4. Procedure for Accreditation and Examination

4.1 Examination Procedures by Type of Examination

(1) Initial Examination, Examination for Continuous Accreditation, Examination of Program Changes, and Re-examination are conducted following the procedures of General Examination.

(2) For an Interim Examination, either a Documentary Examination or a General Examination shall be conducted. The inspection items and the procedure of examination, either documentary examination or general examination, should be determined at the time of preceding examination and review at the Coordinating Committee and informed the program of these inspection items and procedure together with the accreditation results.

4.2. Application for Accreditation and Acceptance of Application

4.2.1. Application for Accreditation

A Program Operating Body seeking accreditation shall apply in writing to JABEE for accreditation, according to the prescribed form. Programs that undergo an Initial Examination, Interim Examination, Examination for Continuous Accreditation, or Examination for Changes must fulfill the Requirements for Acceptance of Accreditation Examination. In the application for accreditation, the Program Operating Body shall appoint a person responsible for the accreditation application (hereafter referred to as "Program Representative," normally the institution's president, a department head, or someone in charge of administration of the department), and a person responsible for the applicant program (hereafter referred to as "Program liaison"), as well as other supporting staff as necessary. The Program Representative and the Program liaison shall act as the liaisons for the accreditation examination, preparing the necessary documents, contacting interested parties, and so on, striving to ensure that the examination is conducted smoothly.

(1) For an Initial Examination, application must be made during the year in which the institution wishes to receive accreditation, by a due date set up separately by JABEE.

(2) For an Examination for Continuous Accreditation or Interim Examination, application must be made during the year following the final year of the term of validity of accreditation, by a due date set up separately by JABEE. However, if the previous examination was a Re-examination, the Program Operating Body must apply for accreditation immediately after receiving the notification of the results of Re-examination.

(3) For a Re-examination, the Program Operating Body must apply by a due date set by the Coordinating Committee.

(4) An Examination of Changes is conducted based on the notice of change submitted to JABEE by a program, if needed.

4.2.2. Acceptance of Application and Assignment of Examination Team Dispatching Organization

The Coordinating Committee shall decide if an application of accreditation is accepted, with reference to the Requirements for Accreditation Examinations for that year, and JABEE shall notify the Program Operating Bodies as to whether their application has been accepted or not. JABEE decides the applicable discipline of the program as well as the Examination Team

Dispatching Organization which will be commissioned to dispatch an Examination Team. In certain circumstances when a program involves two or more fields, these decisions shall be made in consultation with the related societies and associations if necessary. The Examination Team Dispatching Organization must be a society or association that is a regular member of JABEE. The Examination Team Dispatching Organization for Interim Examination shall be assigned to the same organization as the previous examination.

4.3. Composition of Examination Team and Requests for Adjustments

The Examination Team Dispatching Organization selects the candidates of Team Chair and examiners for each program in accordance with "Guidelines for the Selection and Formation of Examination Team," as stipulated separately. The team members will be approved by the Coordinating Committee and officially assigned by JABEE. If necessary, however, JABEE can select and appoint a Team Chair and other examiners in consultation with the Coordinating Committee. In addition, the Examination Team Dispatching Organization can, with the consent of Team Chair and the Program Operating Body, send observers along with the team. JABEE can also send observers from time to time with the consent of Team Chair and the Program Operating Body.

The Examination Team Dispatching Organization should prepare a candidates list of Team Chairs, examiners, and observers, so that an examination team can easily be made and his or her personal career and experiences in an examination team could be reflected in the list, as necessary.

Working closely together with the Team Examiners and in good contact with the team dispatching organization, Team Chair shall move the examination forward from the time when the Self-Inspection Report is received until an examination report are submitted to the relevant Discipline-Based Examination Committee. Team Examiners shall cooperate with the Team Chair. Note that while observers are not intended to conduct an examination, they may state their opinions at the request of Team Chair.

There are two categories of observers, namely those attending as a trainee to become a Team Examiner, and those attending as a monitor such as those of international agreements or some public organizations, etc. The former should desirably experience similar work as other Team Examiners while the latter is allowed to make requests as long as they do not disturb the examination process, subject to the judgment of Team Chair.

JABEE notifies the Program Operating Body of a discipline of the accreditation, the team dispatching organization, and the formation of examination team including brief personal profile of the members, and contact details of the Team Chair, while informing or sending them reference documents necessary for the examination. If the Program Operating Body has good reason to believe that the Examination Team Dispatching Organization or the team members are not eligible either wholly or partially, it can ask for re-adjustments. On receiving such request of re-adjustments, JABEE will confirm what is actually the case and if necessary, rearranges the formation of the team in consultation with the Examination Team Dispatching Organization.

4.4. Inspection Items and Examination

4.4.1. Inspection Items

Examinations shall be conducted with respect to each of the Inspection Items of the Inspection Report.

(1) Inspection Items for an Initial Examination and Examination for Continuous Accreditation shall be all of the Inspection Items corresponding to the Accreditation Criteria that are applicable in the year when the application for examination is made.

(2) Inspection Items for an Interim Examination shall be those items that were rated as weaknesses as well as such items of concerns that were closely related with the weaknesses indicated in the previous examination. In case a correspondence of the inspection items between the previous examination and the current examination should be difficult, because accreditation criteria and inspection items have been changed in the mean time, the Coordinating Committee shall designate the Inspection Items. Note that if there are any additional items that the Program Operating Body deems to be necessary, it shall be possible to examine those items (hereafter referred to as "reference items"), in addition to the inspection items.

(3) Inspection items for a Re-examination shall be those items that were rated as deficiencies in the previous examination, that is, Examination for Continuous Accreditation or Examination of Change. In case a correspondence of the inspection items between the previous examination and the current examination should be difficult, because accreditation criteria and inspection items have been changed in the mean time, the Coordinating Committee shall designate the Inspection Items.

(4) The Inspection Items for an Examination of Changes shall be designated by the Coordinating Committee at the same time when the implementation of Examination of Changes was determined.

4.4.2. Examination and Ratings

Inspection Items shall be examined as to whether or not they satisfy the Accreditation Criteria, and ratings shall be made only with respect to the Inspection Items. Note that for a reference item in the interim examination, rating shall not be made.

The Program Operating Body shall prepare a Self-Inspection Report in accordance with the Guidelines for the preparation of Self-Inspection Report in the current year and must submit the report in writing by a due date that JABEE designates (hereafter referred to as "Self-inspection report submission due date"). After the due date, replacement or amendment of self-inspection report, or any additions other than a list of corrections shall not be accepted. Note that the Program Operating Body shall prepare Self-Inspection Report focusing only on Inspection Items and/or Reference Items, as set forth.

4.5. Flow of the Examination

Flow of the examination is different for the General Examination and the Documentary Examination. Note that in either case, the Team Chair shall be the only person of the team to have any direct contact with the Program Operating Body, and the other examiners and observers are not allowed to contact the Program Operating Body directly. Any crucial change to the examination results due to differing interpretations of the examination criteria, for example, must be conducted in writing between team and Program Operating Body in the name of the Team Chair, and the Team Chair shall make effort to retain such records as photocopies of the relevant documents. Also, the documents, etc., used in the examination shall be sorted out and retained following separately determined guidelines.

4.5.1. General Examination

Initial Examination, Examination for Continuous Accreditation, Examination of Changes, and Re-examination, as well as part of Interim Examinations, shall be conducted as General Examination and shall proceed in the order of steps (1) through (8) below.

(1) Team Chair will consult the Program Operating Body about the time table of the examination, etc.

(2) Program Operating Body prepares a Self-Inspection Report and sends it to both the Examination Team Dispatching Organizations and JABEE by the due date set by JABEE. With respect to the number of copies to be sent, the Program Operating Body shall consult the Team Dispatching Organizations and JABEE. The Team Dispatching Organization sends the Self-Inspection Report to each member of the Examination Team.

(3) The Examination Team examines the Self-Inspection Report, and summarizes the results in the Program Inspection Report-1. If there are queries, the Team Chair will gather them together and directly forward to the Program Operating Body for clarification. If necessary, minimum number of supplemental documents (so called "supplemental documents") can be requested.

(4) The Team Chair sets a time schedule for On-site Visit in consultation with the Program Operating Body. The Program liaison put together and sorts out relevant evidence materials (questions and answers of the exam, course works, syllabi, textbooks, etc.) that are deemed necessary and shown as the evidences of the description of the Self-Inspection Report at the on-site inspection. The Program liaison also works together with the Program Representative and all the concerned people of the program have to be informed of the relevant examination procedures of the on-site inspection and make best efforts for the on-site inspection to be conducted smoothly.

(5) The Examination Team conducts an On-site Visit. At the end of the visit Team Chair prepares the Program Inspection Report-2 and a comprehensive report in consultation with the Team Examiners putting together their observations and findings. Team Chair provides a copy of the Program Inspection Report-2 for the Program Operating Body and the comprehensive report is read out at the final interview.

(6) If the Program Operating Body believes that a factual misidentification is contained in the Program Inspection Report-2, it can file a written claim to such effect to the Team Chair (so called "Additional Description"). The Additional Description must be submitted both to the Team Chair and the Team Dispatching Organization within two weeks after the completion of the On-site Visit. The Team Chair and the Team Dispatching Organization shall notify the Program Operating Body immediately upon the receipt of the Additional Description. Note that no reply shall be issued to the Program Operating Body regarding the handling of the Additional Description.

(7) The Team Chair prepares the First Examination Report based on the Program Inspection Report-2 and the Additional Description submitted by the Program Operating Body if any, in consultation with the Team Examiners. The First Examination Report shall be sent to the Program Operating Body, the Discipline-Based Examination Committee and JABEE through the Team Dispatching Organization, within four weeks after the completion of the On-site Visit. If Team Examiners find any amendment to the contents of the Program Inspection Report-2, even if they are only slight changes, they shall promptly inform the Team Chair of the details of the changes and cooperate in the preparation of the First Examination Report.

(8) If the Program Operating Body finds any objection to the contents of the First Examination Report, it can enter a formal objection in writing (so called "notice of objection".) to the Team Chair. On the other hand, if the Program Operating Body responded immediately to the report by taking a measure on the shortcoming identified in the First Examination Report, it may submit a written improvement report to the Team Chair. Submission of this notice of objection

and improvement report must be submitted to both the Team Chair and the Team Dispatching Organization within seven weeks after the completion of the On-site Visit.

The Team Chair and the Team Dispatching Organization shall notify the Program Operating Body immediately of the receipt of the notice of objection and/or the written improvement report. If there are any doubts about the contents of the notice of objection or written improvement report, the Team Chair shall make queries to the Program Operating Body as necessary. Note that no reply shall be issued to the Program Operating Body regarding the handling of the notice of objection or written improvement report.

(9) In consultation with the Team Examiners, the Team Chair prepares the Secondary Examination Report taking into consideration of any notice of objection or improvement report submitted by the Program Operating Body in response to the First Examination Report, which will be submitted to the Discipline-Based Program Examination Committee and JABEE through the Team Dispatching Organization within ten weeks after the completion of the On-site Visit. If the Team Examiners find any amendment to the contents of the Program Inspection Report-2, even if they are only slight changes, they shall promptly inform the Team Chair of the details of changes and cooperate in the preparation of the Secondary Examination Report.

If Team Dispatching Organization confirms that the Program Operating Body will not submit any notice of objection or improvement report, the Secondary Examination Report is immediately prepared by the Team Chair in due form and sent to the Discipline-Based Examination Committee and JABEE through the Team Dispatching Organization.

4.5.2. Documentary Examination

Some Interim Examinations shall be conducted as Documentary Examinations and shall proceed in the order of steps (1) through (6) below.

(1) Team Chair will consult the Program Operating Body about the time table of examination, etc.

(2) Program Operating Body prepares a Self-Inspection Report and sends it to both the Team Dispatching Organizations and JABEE by the due date set by JABEE. With respect to the number of copies to be sent, the Program Operating Body shall consult the Team Dispatching Organization and JABEE. The Team Dispatching Organization sends the Self-Inspection Report to each member of the Examination Team.

(3) Examination Team examines the Self-Inspection Report, and summarizes the results in the Program Inspection Report-1. If there are queries, the Team Chair will gather them together and directly forward to the Program Operating Body for clarification. If necessary, a minimum quantity of supplemental documents can be requested.

(4) Team Chair, in consultation with the Team Examiners, prepares the primary Examination Report, based on the results of the examination by the Self-Inspection Report. Team Chair sends the primary Examination Report by the due date set by the Team Dispatching Organization, to the Program Operating Body, the Discipline-Based Examination Committee and JABEE.

(5) If the Program Operating Body finds any objection to the contents of First Examination Report, it can enter a notice of objection to the Team Chair. On the other hand, if the Program Operating Body responded to the report by taking a measure immediately on the shortcoming identified in the First Examination Report, it may submit a written improvement report to the Team Chair. Submission of this notice of objection and improvement report must be submitted

to both the Team Chair and the Team Dispatching Organization within three weeks after the due date set by the Team Dispatching Organization.

Team Chair and the Team Dispatching Organization shall notify the Program Operating Body immediately upon receipt of them. If there are any doubts about the contents of the notice of objection or written improvement report, Team Chair shall make queries to the Program Operating Body as necessary. Note that no reply shall be issued to the Program Operating Body regarding the handling of the notice of objection or written improvement report.

(6) In consultation with the Team Examiners, Team Chair prepares the secondary Examination Report taking into consideration of any notice of the objection or improvement report submitted by the Program Operating Body in response to the First Examination Report, which will be submitted to the Discipline-Based Program Examination Committee and JABEE through the Team Dispatching Organization within six weeks after the due date set by the Team Dispatching Organization. If the Team Examiners find any amendment to the contents of the Program Inspection Report-2, even if they are only slight changes, they shall promptly inform Team Chair of the details of the changes and cooperate in the preparation of the Secondary Examination Report.

If Team Dispatching Organization confirms that the Program Operating Body will not submit any notice of objection or improvement report, the Secondary Examination Report is immediately prepared by Team Chair in due form and sent to the Discipline-Based Examination Committee and JABEE through the Team Dispatching Organization.

4.6. Flow of Accreditation

4.6.1. Review and Coordination by Discipline-Based Examination Committee

Discipline-Based Examination Committee in a discipline reviews and coordinates the Secondary Examination Reports regarding all programs in the discipline, and prepares Examination Report in the discipline which will be submitted to JABEE. The terms "review" and "coordinate" here mean a check out work whether the examination results are treated consistently, especially with regard to the judgment levels of ratings which must be applied fairly to all programs in the discipline. The committee can ask the Team Chair for his or her opinions on the judgments. After the coordination by the committee the ratings of an Inspection Item in the Secondary Examination Report could be different from that of First Examination Report, however, an amendment is done by consulting the relevant Team Chair and at his or her consent. The reason of the amendment should be clarified in the Secondary Examination Report.

4.6.2. Review and Coordination by Coordinating Committee

The Coordinating Committee reviews and coordinates the Examination Report of all programs in all disciplines, prepares both the Final Examination Report and accreditation recommendation and submits them to the Accreditation Commission. The terms "review" and "coordinate" here refer to the process of ensuring consistency in rating of the inspection items among different disciplines. The Coordinating Committee can ask the Team Chair of the relevant Discipline-Based Examination Committee for his or her opinion on the judgment of the rating. In case the Coordinating Committee amends the results of the Examination Report in a discipline the amendment is done by consulting the chair of the Discipline-Based Examination Committee in the discipline and at his or her consent. The reason of the amendment should be clarified in the Final Examination Report.

In response to the request of the Coordinating Committee, the chair of the Discipline-Based Examination Committee gives his or her view concerning the accreditation recommendation and the term of validity of the accreditation.

If the Coordinating Committee decides after review and coordination that a Re-examination is necessary for the program that has undergone an examination for Continuous Accreditation or Examination of Changes, the preparation of Final Examination Report and accreditation decision are deferred. The Coordinating Committee shall ask the relevant Program Operating Body if they consent to a Re-examination in the following year. The Program Operating Body has to respond by the due date. If it is confirmed that the Program Operating Body consented to a Re-examination, the procedure for the Re-examination commences. If the Program Operating Body is not willing to undergo a Re-examination, or if their intent cannot be confirmed by the due date, the deferment status shall be canceled, and the Final Examination Report and the recommendation of the accreditation decision shall be prepared and submitted to the Accreditation Commission without delay.

4.6.3. Review and Coordination by Accreditation Commission and the Approval by the Board of Directors

The Accreditation Commission reviews the Final Examination Report and accreditation recommendation submitted by the Coordinating Committee, and decides whether or not accreditation is granted, which should be approved by the Board of Directors of JABEE. The Coordinating Committee must submit following documents to the Accreditation Commission.

- [a] Recommendation of accreditation
- [b] Final Examination Report
- [c] Self-Inspection Report (attached with important references if necessary)

4.6.4. Notification of Accreditation Decision

JABEE notifies the Program Operating Body, the Discipline-Based Examination Committee, and the Team Dispatching Organization about the accreditation decision and the term of validity of accreditation with a copy of the Report of Examination Result in which the next inspection items at Interim Examination are shown in case of shortened accreditation period. Names of the accredited programs are immediately announced to the public. The Team Dispatching Organization notifies the concerned Team Chair and Team Examiners of the accreditation decision, as well as the final results after the coordination.

4.7. Appeal

Program Operating Body can raise an appeal against the accreditation decision to the Board of Directors with the reason for objection within three months after the notification of the decision, if it finds such accreditation decision unacceptable. Appeal Commission set by the Board is responsible for the appeal and conducts a careful investigation of the factual circumstances, and arbitrates. JABEE notifies the Program Operating Body, the Discipline-Based Examination Committee, and the Team Dispatching Organization about the decision. The Team Dispatching Organization will notify the relevant Team Chair and Team Examiners about the decision. The decision of the Appeal Commission is final and cannot be overruled.

4.8. Notes for Multiple Programs or Disciplines

4.8.1. Examination of Multiple Programs in an Institution

In cases multiple programs are applied for accreditation from an institution, JABEE suggests that the relevant Examination Team Dispatching Organizations make an effort to coordinate and conduct On-site Visits under the same time table for all programs. JABEE also suggests Team Dispatching Organizations making an effort to conduct the examinations efficiently, for example, by looking at common inspection items jointly.

4.8.2. Accreditation of the Program in Multiple Disciplines

Where a program desires to be accredited in multiple disciplines, the program should be examined in respective disciplines. (Refer to “2.2 Scope of Accreditation”.) However, one Examination Team is assigned and conducts examination of both disciplines for such a program. The Examination Team comprises a Team Chair from a discipline and a vice Team Chair from another discipline. In principle an Examination Team is composed of the same number of members in each discipline. A team normally comprises four members including Team Chair and vice chair. The Coordinating Committee and the related Engineering Societies consult each other and decide which will take the role of Team Dispatching Organization.

If no engineering society is found that is eligible for the examination in any of the relevant disciplines, the Coordinating Committee shall deliberate and decide the composition of the examination team.

The examination team should make an effort to conduct the examination efficiently, for example, by looking at common inspection items jointly. With regard to the examination of each Program Criteria, their inspection results shall be reviewed by the respective engineering societies, and then approved by the JABEE Coordinating Committee.

5. On-site Visits

5.1. Items for On-site Visits

Following items are examined and confirmed by conducting On-site Visits whether or not a program satisfies the Accreditation Criteria.

(1) Examination of items which are difficult to be confirmed in Self-Inspection Report
To examine focusing on the supplemental materials provided by the program for confirmation.

(2) Examination of the items like educational outcomes which are difficult to be demonstrated in Self-Inspection Report

Such things only available on-site as teaching materials, student works, exam questions and answers, graduate theses, and experiment reports (hereafter referred to as “on-site available evidences”), are examined. If submission of course works are required as substitute for make-up exams, such course works are also examined. Program Operating Body is asked to prepare evidences about the level of pass marks of exams so that Examination Team can readily identify them.

(3) Close examination of evidences that have been assessed by the Program Operating Body. Attention should be paid to the outcomes against the learning and educational objectives of the program.

(4) Survey of actual quantitative curriculum requirements
Particular attention should be paid to confirm whether the program offers to their students the minimum amount of contact hours as stated in the self-inspection report.

(5) Survey of educational methods and environment

(6) Interviews with Program Representative, Program liaison, faculties, staff members, enrolled students, program graduates, etc.

Interviews are held to confirm if the contents of the Self-Inspection Report and the relevant materials are actually implemented as stated. Also any educational concerns or problems are to be identified. Students for an interview are selected as being broadly represented. Team

Examiners are not allowed to directly test students or program graduates to check out their level of achievement against the learning and educational objectives.

(7) Strengths and weaknesses of the program as identified by the Inspection of the Self-Inspection Report.

Not only finding out shortcomings, but make efforts to encourage their strengths.

5.2. Methods and Procedures of On-site Visits

The rule is that an On-site Examination is to be conducted in three days (staying overnight two nights), including the day of arrival at the site. But in the case of an Interim Examination with only a small number of Inspection Items to be examined, for example, time schedule may be shortened according to the circumstances. The team and the Program Operating Body should work together at the details of the On-site Visit, including arranging visit days. The following paragraphs are served as an exemplar of On-site Visit.

It is prohibited to picture or audio record the proceedings of the visit by Examination Team or Program Operating Body. With respect to still pictures (photographs), the team is permitted to photograph only the minimum content necessary to serve as an evidential basis for the inspection, and the Team Chair is responsible for the photography. The taking of still photographs by persons associated with the Program Operating Body is also permitted, but attention must be paid for that individuals of team members or details of the inspection are not specified.

5.2.1. Preparations Prior to On-site Visit

(1) Assignment of Team Chair

(a) To take following action as needed after consulting Program Representative or Program Liaison of the institution.

[1] To confirm the program to be examined, while identifying the way of communication between the Program Operating Body and the Examination Team (or the Team Dispatching Organization).

[2] To work on the outline of the On-site Visit schedule.

[3] To request the Program Operating Body to provide any materials If the Team Chair needs clarification on some issues or requires supplemental documents after inspecting the Self-Inspection Report, or to arrange a meeting with the Program Representative or Program Liaison so that collective explanation could be delivered at the first meeting on the first day of the visit.

[4] To notify the Program Operating Body of wishes for the selection of interviewees (faculties, students, program graduates, etc.).

[5] To determine the final schedule of the On-site Visit taking into consideration of the availability of all Examiners. The Team Chair notifies the Team Dispatching Organization of the final schedule and JABEE is informed of the schedule by the Team Dispatching Organization.

[6] To notify the Program Liaison of the itinerary of all of the team members (including the time schedule of arrival and departure).

(b) Tasks regarding Team Examiners

[1] To confirm if the Self-Inspection Report and supplemental documents regarding the program has been duly delivered and received.

[2] To ask Team Examiners to review these documents and to prepare Program Inspection Report -part 1- which should be delivered to the Team Chair at least three weeks before the On-site Visit.

[3] If necessary, to nominate one of the Team Examiners as vice-chair who will serve as proxy Team Chair.

[4] To inform Team Examiners of the time schedule of the On-site Visit.

[5] To instruct each Team Examiner to inform the chair of his or her travel schedule including arrival and departure time to the institution.

(c) Tasks to be done in consultation with Team Examiners

[1] To extract the items that must be clarified and dealt with prior to the examination based on the Program Inspection Report -Part 1- prepared by each Team Examiners together with that of the Team Chair, and take necessary action such as requesting the Program Operating Body to provide supplemental documents, etc.

[2] To confirm the assessment method and criteria of student's achievement against learning and educational objectives.

[3] To be certain about the detailed schedule (including Inspection Items, the job assignment of each team members).

[4] To expedite the preparation of Program Inspection Report -Part 1- and –Part 2 - as far as possible. Incidentally the format of the Program Inspection Reports - Part 1 - can be changed as they are used only within the team, whereas Part 2's format shall not be changed.

(d) Tasks regarding Observers of the visit.

[1] To notify Observers of the dates of the visit.

[2] To ask Observers to inform the Team Chair of their travel itinerary to the institution (including time schedule of arrival and departure).

(e) To make sure that the On-site Visit will be done as scheduled confirming the Program Representative (or the Program Liaison) of the institution at least a week before visit.

(2) Assignment of Team Examiner

(a) To respond to the requests by the Team Chair, while appreciating the roles of Team Chair as outlined in (1) above.

(b) To read carefully the "Accreditation Criteria", "Guidelines for the Interpretation of Accreditation Criteria", "Procedures and Methods of Accreditation and Examination," "Self-Inspection Report," and "Guide to Preparing Self-Inspection Report" to fully understand their contents. Queries if any can be presented to Team Chair.

(3) Agenda of Program Representative and Program Liaison

(a) To coordinate with the Team Chair for the detailed schedule of the On-site Visit (including time schedule, Inspection Items, etc.)

(b) To identify the individuals involved in the program examination (faculty, staff, students, program graduates, and etc.), time and place for interviews, premises and facilities to be visited, while preparing the explanatory and evidential materials required for the examination, all in accordance with the examination schedule, and to comply with the specific requests by the Team Chair.

(c) Hosting the examination team during their visit (providing transportation to and from the

nearest train station, accommodation, meeting rooms and other facilities and equipments for the examination team, etc.). This shall be done as necessary, in collaboration with the Team Chair. The expenses incurred by the team and institution shall be determined separately.

5.2.2. The day of arrival (Day 0)

(1) First meeting of Examination Team

This meeting is usually held in the evening of the day of arrival at the examination site. However, when time is believed to be running short for the examination starting the day after, it is recommended that the meeting be held earlier say in the afternoon of the day of arrival and that the evening be dedicated to more time-consuming jobs other than those related to the items specified below, such as checking the evidences regarding student's outcomes against the learning and educational objectives.

(a) Team Chair

To chair the first meeting and performs the tasks as listed below.

[1] Request each Team Examiner to give a brief explanation about Program Inspection Report - Part 1 - and their likely shortcomings wherein. Due to the time constraint at the first meeting, however, such requests are desired to have been talked out within the team, prior to the On-site Visits.

[2] In case there has been provided beforehand by the Program Operating Body any responses or supplemental materials regarding the inquiries made by the team, the Chair confirms if they can make a decision or they need to work further on the issues.

[3] If, after the Inspection of the Self-Inspection Report, it is believed that certain items may better be explained collectively by the Program Representatives (or Program liaison), and if such intent has been conveyed to the Program Operating Body, the team should have a meeting with them so that collective explanation could be delivered by them on the first day of the visit.

[4] To confirm the supplemental documents which have been requested to provide from the Program Operating Body beforehand.

[5] To identify how to confirm the outcomes of students against the learning and educational objectives.

[6] To confirm Inspection Items and inspection schedule (including the respective job assignment of the Team Chair and each Team Examiner), and to make necessary modifications.

[7] To confirm how to get in touch each other during the On-site Visit.

[8] To proceed with the preparations of the Program Inspection Report - Part 2 - and Comprehensive Report as much as possible.

[9] Indicate the Team Examiners to take notes on the matters, especially on the observations related to the accreditation recommendation and terms of validity of accreditation which are necessary to draft a Second Examination Report.

(b) Team Examiners

[1] To provide information as requested by the Team Chair.

[2] To make himself or herself familiar with the program and the related areas.

(c) Observers

[1] To provide an opinion as requested by the Team Chair.

[2] To make himself or herself familiar with the program and the related areas.

5.2.3. First Day of On-site Visit (Day 1)

(1) First meeting between the Examination Team and the Program Operating Body

(a) Assignment of the institution representative

[1] To host the first meeting between examination team and the Program Operating Body, introducing the attending persons concerned with the program to the examination team.

[2] To give a greeting on behalf of the Program Operating Body.

[3] To explain about the examination schedule prepared by the Program Operating Body.

[4] To deliver collective clarification and explanation on the items and the supplemental documents prepared and provided according to the prior requests by the Team Chair.

[5] Sending the team accompanied by the program liaison to the department, where On-site Visits are conducted.

[6] If necessary, to continue the interview further with the Team Chair about any specific request made by him.

(b) Team Chair

[1] To introduce Team members

[2] To give a greeting on behalf of JABEE and the examination team

[3] To explain about the inspection items and examination schedule, notifying Program Operating Body of changes of schedule if any, and to ask such changes be incorporated into the schedule

[4] To encourage the Program Operating Body to voice any requests concerning JABEE examination, accreditation policies, and/or examination team, while reflect the voice in the process of examination

[5] If requested, the Team Chair continues the interview with the institution representative and on behalf of the chair the vice chair appointed beforehand will start to conduct the examination.

[6] To interview as necessary

- the president or rector of the institution and/or the chairman of the board of directors

- secretary-general or head of administration

- others such as treasurer, admission coordinator, careers coordinator, etc.

(c) Examiners and observers

To work on the inspection of the program following the chair's instructions

(2) Program inspection on the Day 1

(a) Team Chair

To make effort to work together with Team Examiners as far as possible

(b) Team Examiners

To perform the following task, keeping in mind the Accreditation Criteria

[1] To perform the assigned task as part of the program examination

[2] To interview the program liaison regarding the submitted materials and the program itself.

[3] To interview with faculty and staff, querying to confirm whether they are aware of the relevant contents stated in the Self-Inspection Report.

[4] To interview students to confirm whether they understand the learning and educational objectives of the program, whether they are aware that all students are expected to achieve those objectives. If necessary, to interview program graduates.

[5] To examine the evidential documents provided by the Program Operating Body. This is an extremely important process of the examination to confirm whether or not students have achieved the learning and educational objectives and whether the level of achievement is appropriately established.

[6] To take notes any information that would be useful in the preparation of the Program Inspection Reports - Parts 2 -, the Comprehensive Report, and the First and the Second Examination Reports.

(c) Observers

To follow the instructions of Team Chair.

(d) Program Representative and the Program liaison

To comply with the requests of Team Chair.

(3) Lunchtime meeting on the first day (Only in the case this meeting is agreed upon by the Program Operating Body and the Examination Team)

This meeting is expected to be held in a relaxed atmosphere since it is the only socializing opportunity during the examination process. The members of both sides can be personally introduced to each other. However, exchange of gifts, etc. is prohibited.

(4) Second meeting of the Examination Team (in the evening of Day 1)

(a) Team Chair

[1] To instruct each member to provide a brief report. In case judgment is different from that of the previous day, to ask to elaborate on the reason of the changes.

[2] To reconfirm the Inspection Items and the examination schedule for the following day.

[3] To identify issues which have to be solved as a whole organization of the Program Operating Body or its senior management.

[4] To proceed with the preparation of the Program Inspection Report - Part 2 - and the Comprehensive Report.

(b) Team Examiners

[1] To provide a brief report. In case judgment is different from that of the previous day, to elaborate on the reason of changes.

[2] To proceed with the preparation of the Program Inspection Report - Part 2- and the Comprehensive Report in cooperation with Team Chair.

(c) Observers

[1] To provide an opinion as requested by Team Chair.

5.2.4. Second Day of On-site Visit (Day 2)

(1) Program inspection on the Day 2

(a) Team Chair and Team Examiners

The following tasks are to be proceeded in mutual consultation in the morning.

- [1] To check the operating status of the educational feedback system inspecting rules and meeting minutes, etc.
- [2] To check the status of systematic activities aimed at improving the quality of faculty while inspecting the records of activities, etc.
- [3] To inspect lectures, experiments, exercises, etc., while conducting interviews with faculty, staff, students, and etc. as needed.
- [4] To inspect libraries, IT facilities, study room, rest area, etc.
- [5] To examine further on any items which have remained unsolved after the inspection on the Day 1.

(b) Observers
To follow the instructions of the Team Chair.

(c) Program Representative and Program liaison
To comply with the requests of Team Chair.

(2) Third meeting of the Examination Team (Day 2)

(a) Team Chair

- [1] To provide the Program Liaison with a summary of the findings obtained by the On-site Visit, prior to lunch.
- [2] To inform the concerned staff of the Program Operating Body, of the schedule of the Exit Interview.
- [3] To requesting each examiner to report on any changes, etc. in judgment as a whole or just for specific items, and to compile those results in Program Inspection Report - Part 2 - and to prepare the Comprehensive Report for the Exit Interview.

(b) Team Examiners

- [1] To reporting to the Team Chair on any changes in judgment as a whole or just for specific items.
- [2] To assist the Team Chair in preparing the Program Inspection Report - Part 2 - and the Comprehensive Report.

(c) Observers

- [1] To provide an opinion as requested by the Team Chair.

(3) Exit interview

The Examination Team meets at the designated location and conducts an Exit Interview. Yet the Exit Interview is a closed meeting and the Program Operating Body reserves the right to select attendants, and is allowed to take notes and to ask limited number of questions.

(a) The Team Chair hands out the Program Inspection Report - Part 2 - to the Program Operating Body.

(b) The Team Chair verbally delivers the results of the On-site Visit to the Program Operating Body.

- [1] The Team Chair recites the written Comprehensive Report referring the main points of the Program Inspection Report - part 2 -. The Comprehensive Report fully comment on the strong points of the program at first and then it must comprehensively identify program's shortcomings based on the Accreditation Criteria. The main points to be

recited should especially focus on the Inspection Items that are rated as deficiencies or weaknesses including the cause of their ratings. Team Chair should refrain from making any informal remarks that are not included in the report. In addition, the Comprehensive Report should not be handed out to the Program Operating Body.

[2] At this moment any remarks regarding accreditation decision should not be made.

- (c) The Team Chair informs the Program Operating Body, that if any factual misidentification is found in the items contained in the Program Inspection Report - Part 2 -, a written claim -additional description- to such effect can be filed by the Program Operating Body. It should be noted that the additional description is to be presented to the Team Chair and the Team Dispatching Organizations within two weeks after the On-site Visit is completed.

Official procedure of the On-site Visit is hereby completed.

5.3. On-site Visit Schedule (an example)

Actual On-site Visit schedule is decided in advance in consultation with the Program Operating Body. A typical example of the schedule is given below. Sites to be visited and the time needed for the visits must be carefully planned in advance considering the location and the number of campuses to be visited, where longer time of visit schedule could be arranged if necessary.

(1) The Day of Arrival (Day 0)

[a] Afternoon (for example, 3:00 pm. exact time is decided by Examination Team): Team members meet on-site.

[b] Team members confirm the schedule and have a meeting to assign tasks among the members.

[c] To discuss about and share the concerned items.

[d] Others

If the expected time schedule for Day 1 and Day 2 looks short, it is recommended that some of the tasks planned for Day 1 be shifted to the afternoon of Day 0, such as the inspection of evidences related to the student's outcomes against the learning and educational objectives.

(2) First Day of On-site Visit (Day 1)

[a] To interview Program Representative, or Program Liaison to confirm policies of the department and the program concerned (including questions about the learning and educational objectives).

[b] To interview program liaison to confirm educational methods from the view point of the relationship with the learning and educational objectives. To save time, reference to the matters already described in the Self-Inspection Report should be minimized (or possibly omitted).

[c] To check the assessment methods to determine the student's outcomes against the learning and educational objectives, through relevant questions and answers, and examination.

[d] To check the quantitative curriculum requirements, through relevant questions and answers, and examination.

[e] To check lecture contents (syllabi, textbooks, and exam questions and examples of marked answer papers, etc.)

[f] To check laboratory works and practice exercises (course works, etc.)

[g] To examine graduation thesis, etc.

- [h] Interviews with faculty, staff, students and alumni including graduate school students
- [i] To discuss about and share the concerned items.
- [j] To prepare the initial draft of the Program Inspection Report - Part 2 - as well as the draft of comprehensive Report.

(3) Second day of On-site Visit (Day 2)

- [a] To inspect the educational feedback system and the relevant activities (Inspection of rules, meeting minutes, etc.)
- [b] To check the systematic activities for improving the quality of the faculty, and relevant activity records
- [c] To inspect a class at work, including lectures, laboratory works, practice exercises, etc., and to interview faculty, staff and students, etc.
- [d] To inspect libraries, IT-related facilities, study room and rest facilities, etc.
- [e] To notify the findings by the On-site Visit to the Program Representative.
- [f] To prepare the final version of the Program Inspection Report - Part 2 - and Comprehensive Report
- [g] To notify the examination results to the Program Representative, Program Liaison.

6. Preparation of Examination Report and the Responsibilities of Respective Parties

6.1. Preparation of Examination Report

6.1.1. Preparation of First Examination Report

(1) Program Operating Body (in case of General Examination)

File a written claim-additional description-, if any factual misidentification is found in the items contained in the Program Inspection Report - Part 2 -. <cf. 4.5.1(6)>

(2) Team Chair

(a) Notifies the Program Operating Body of the acceptance of its additional description.
<cf. 4.5.1(6)>

(b) Prepares a First Examination Report and send it to the Program Operating Body, the Discipline-Based Examination Committee and JABEE, via the Team Dispatching Organization. <cf. 4.5.1(7), 4.5.2(4)>

(3) Team Examiners

Cooperate with the Team Chair in preparation of the First Examination Report. <cf. 4.5.1(7), 4.5.2(4)>

(4) Examination Team Dispatching Organization

(a) Notifies the Program Operating Body of acceptance of its additional description.
<cf. 4.5.1(6)>

(b) Accepts the First Examination Report from the Team Chair and forwards it to the Program Operating Body, the Discipline-Based Examination Committee and JABEE. <cf. 4.5.1(7), 4.5.2(4)>

6.1.2. Preparation of Second Examination Report

(1) Program Operating Body

- (a) Raises an objection in writing (so called “notice of objection”) to the First Examination Report, if any. <cf. 4.5.1(8), 4.5.2(5)>
- (b) Submits a written improvement report if they responded immediately on shortcomings pointed out in the First Examination Report. <cf. 4.5.1(8), 4.5.2(5)>

(2) Team Chair

- (a) Notifies the Program Operating Body of acceptance its notice of objection or an improvement report. <cf. 4.5.1(8), 4.5.2(5)>
- (b) Prepares a Second Examination Report and send it to the Discipline-Based Examination Committee and JABEE, via the Team Dispatching Organization. <cf. 4.5.1(9), 4.5.2(6)>

(3) Team Examiners

Cooperate with the Team Chair in preparation of the Second Examination Report.

(4) Team Dispatching Organization

- (a) To confirm if a notice of objection or an improvement report has been submitted by the Program Operating Body. <cf. 4.5.1(9), 4.5.2(6)> If submitted, notify the Program Operating Body of its acceptance. <cf. 4.5.1(8), 4.5.2(5)>
- (b) To receive the Second Examination Report from Team Chair and forward the report to the Discipline-Based Examination Committee and JABEE.

6.1.3. Preparation of a Program Examination Report by Discipline

(1) Discipline-Based Examination Committee

Prepares Program Examination Report by Discipline and a spread sheet showing the ratings of all inspection items of all programs in the discipline and submit them to JABEE. <cf. 4.6.1>

(2) Team Chair

Expresses his or her views at the Discipline-Based Examination Committee. <cf. 4.6.1>

6.1.4. Preparation of Final Examination Reports and Recommendations for Accreditation Decision by the Coordinating Committee

(1) Coordinating Committee

- (a) Prepares a Final Examination Report and the recommendation of accreditation decision for each program and submits them to the Accreditation Commission. < cf. 4.6.2>
- (b) Decides about a Re-examination, if necessary for a program and asks for the consent of the relevant Program Operating Body to conduct a Re-examination. < cf. 4.6.2 >

(2) Chair of the Discipline-Based Examination Committee

To give chair's views at Coordinating Committee < cf. 4.6.2 >

6.1.5. Accreditation Decision and Its Approval

(1) Accreditation Commission

Decides recommendations for each program and submit them to the Board of Directors for approval. <cf.4.6.3>

(2) The Board of Directors

(a) Approves the accreditation decision <cf.4.6.3>

6.2. Responsibilities of Respective Parties

(1) JABEE

(a) Receives applications for accreditation. < cf. 4.2.1.>

(b) Coordinating Committee decides if an application meets with acceptance and notifies the relevant Program Operating Body of the decision. < cf.4.2.2.>

(c) Coordinating Committee determines on the area of program Criteria, type of examination, and the Examination Team Dispatching Organization. < cf. 4.2.2.>

(d) To appoint the Examination Team. < cf. 4.3.>

(e) To notify the relevant Program Operating Body of the area of Program Criteria, the Team Dispatching Organization, and the composition of the Examination Team (including brief personal profiles of the members, plus contact details of the Team Chair) and to inform them of all relevant examination documents. < cf. 4.3.>

(f) When any complaints are made to JABEE concerning the arrangements of the Team Dispatching Organization or the Examination Team, JABEE ascertains the facts and undertakes the arbitration of the issues. < cf. 4.3.>

(g) Coordinating Committee drafts a Final Examination Report and makes recommendation about accreditation decision on each of programs.

(h) Accreditation Commission makes accreditation decision on each of programs. < cf. 4.6.3 and 6.1.5(1)>

(i) The Board of Directors approves the decisions of Accreditation Commission. The legal responsibility for the accreditation decision rests with the Board of Director. < cf. 4.6.3, 6.1.5(2), and 2.3.>

(j) JABEE notifies Program Operating Body of the accreditation decision. < cf. 4.6.4>

(k) Appeal Commission is responsible for arbitration and a decision when a notice of objection is filed by a Program Operating Body. < cf. 4.7.>

(2) Examination Team Dispatching Organization

(a) To undertake conducting the examination. < cf. 4.2.2.>

(b) To select examination team member. < cf. 4.3. >

(c) To receive Self-Inspection Report and forward it to Examination Team. < cf. 4.5.1(2) and 4.5.2(2) >

(d) In case of Documentary Examination, to set a due date for the submission of documents and notifying the Examination Team and the Program Operating Body of the due date. < cf. 4.5.2(2).>

(e) In case of General Examination, to notify the Program Operating Body of the acceptance of an additional description < cf. 4.5.1(6) and 6.1.1(4) (a) >

(f) To forward the First Examination Report to the Program Operating Body, the Discipline-Based Examination Committee and JABEE. < cf. 4.5.1(7), 4.5.2(4), and 6.1.1(4) (b) >

(b) >

(g) To confirm whether or not a notice of objection or a written improvement report has been submitted and to notify the Program Operating Body that it has been received. < cf. 4.5.1(9), 4.5.2(6), and 6.1.2(4) (a) >

- (h) To forward the Secondary Examination Report to the Discipline-Based Examination Committee and JABEE. < cf. 4.5.1(9), 4.5.2(6), and 6.1.2(4) (b) >
- (i) To notify Team Chair and Team Examiners of the examination results including the accreditation decision < cf. 4.6.4>

(3) Program Operating Body

- (a) To appoint a Program Representative and a Program Liaison and to submit to JABEE an application for the accreditation. < cf. 4.2.1>
- (b) To request for a rearrangement regarding the Examination Team Dispatching Organization or the Examination Team, if they are not acceptable. < cf. 4.3.>
- (c) To prepare and submit Self-Inspection Report by due date. < cf. 4.4.2, 4.5.1(2), and 4.5.2(2). >
- (d) To prepare for On-site Visit. < cf. 4.2.1, 4.5.1(4), 5.1(2), and 5.2.1(3).>
- (e) To respond to the On-site examination. < cf. 4.2.1, 5.2.3(1) (a), 5.2.3(2)(d), 5.2.4(1)(c), and 5.2.4(3).>
- (f) In case of General Examination, to prepare and submit additional descriptions, as necessary. < cf. 4.5.1(6) and 6.1.1(1)>
- (g) To prepare and submit a notice of objection and/or written improvement reports, as necessary. < cf. 4.5.1(8), 4.5.2(5), and 6.1.2(1) >
- (h) To raise appeals against the examination results to JABEE, as necessary. < cf. 4.7.>

Appendix: Glossary of Terms

“Accreditation Criteria”

“Accreditation Criteria” are hereby stipulated for the accreditation of the basic educational programs to develop engineers provided by institutions of higher education. A program seeking accreditation must provide explanations together with supporting materials demonstrating that the program meets all of the criteria.

“Comprehensive Examination”

An examination procedure where both documentary examination and On-site Visit are carried out. This procedure is applied, in principle, for accreditation.

“Contact Hours”

“Contact hours” means class and study hours under the guidance of faculty and the like. “Faculty and the like” is defined as persons who provide substantial supervision and guidance to student learning. Specifically, it includes faculty, engineering staff and teaching assistants (TAs) at institutions of higher education, as well as instructors at cooperating companies who provide substantial supervision and guidance to students during off-campus training in internships. However, in order for contact hours where persons other than faculty are supervising and guiding student learning to be counted in the study hours, a system must be established so that faculty members can respond to consultation and questions by the students.

“Design and Design Ability”

“Design” here signifies “engineering design”. It is not limited to the drawing of plans, but refers to the synthesis of various academic disciplines and technologies to pursue practicable solutions to a problem that does not necessarily have one correct answer. “Design ability” refers to the abilities required for developing such solutions. Design education is the most important characteristic of engineering education, and its subjects may relate to either hardware or software (including systems).

Engineering design ability includes:

- ✓ The ability to come up with conceptual ideas;
- ✓ The ability to identify and formulate a problem;
- ✓ The ability to integrate (unify) various scientific and technological knowledge and its application;
- ✓ Creativity;
- ✓ The ability to conceive the problem from the viewpoints of public well-being and safety, culture, economy, environmental impact, ethics etc. and to find a solution to the problem under these constraints;
- ✓ The ability to express and describe the ideas in drawings, sentences, equations, programming etc.;
- ✓ The ability to communicate;
- ✓ The ability to collaborate with others (teamwork); and
- ✓ The ability to continuously plan and to work as planned.

Engineering design requires the integrated harnessing of all these competences, but design ability encompasses a wide range of content and levels. The foundation of engineering design education is the cultivation of the ability to solve problems by harnessing the numerous abilities that result from engineering education (“integrated ability”). In cases where the engineering design education is implemented in plural subjects, it is necessary to pay attention to whether the program cultivates integrated ability (do the students acquire design experience, for example?), and in cases where engineering design education is implemented in graduation research projects, it is necessary to pay attention to whether all students receive appropriate design education.

“Disclosure” and “Display”

Both of the terms “disclosure” and “display” have the meanings as “being made clear and become known broadly through printed material and etc.” In addition, “disclosure” has no limitation and condition on the subjects and the range to be known so that everybody can read the subjects commonly.

“Educational Contributions Evaluation”

The aims of “Educational contributions Evaluation” are to enhance faculty’s motivation and to promote high quality education. It intends to pay due recognition to faculty’s educational activities as job performance as well as to share good practice with other faculty members through the faculty development system.

“Engineering Societies”

Single or joint engineering societies and associations that are regular members of JABEE

“Engineers”

The term "engineer" refers to a professional dedicated to engineering. "Engineering" is defined as a profession in which engineers make full use of their knowledge in mathematical science, natural science, and science of the artificial, to develop, research, manufacture, operate, and maintain hardware and software of artificial device and systems that contribute to the welfare and security of mankind, through economic exploitation of resources and natural forces, with good perspective of the future impact of such exploitation on society and the environment. The term profession here refers to a specialist occupation that provides specific services as respects certain functions needed by society, by taking advantage of advanced knowledge as well as practical experience, operating in autonomy according to ethical codes of its own, thus the term clearly means something more than mere occupation. Incidentally “Engineers” as defined by JABEE refers to engineering professionals, including those engaged in research and development work.

“Evidential Materials”

“Evidential Materials” means documents supporting if a program meets the Accreditation Criteria. It helps the Applicant Institution to explain how the program satisfies the Accreditation Criteria. It is Applicant Institution’s responsibility, in principle, to select and prepare appropriate evidential materials. Evidential materials include documents presented as “Self-Inspection report Volume II: Quoted Reference and Evidential material.” Items, which cannot be confirmed and which are difficult to be presented within the Self-Inspection Report, are examined at On-site Visits.

“Examination (=Inspection, evaluation)”

(1) Comprehensive examination for initial accreditation

When a program applies for accreditation for the first time, “comprehensive examination for initial accreditation” is carried out for the program.

(2) Interim Examination

The program with reduced term of validity of accreditation should be examined again within the year following the last year of the term of validity. (Usually it is within the third year.) This examination is called as “Interim Examination.” The program can continue to be accredited by successfully undergoing “Interim Examination.” There are two types of procedures: one is conducted only by documentary examination called as “Interim Examination by Report” ; and the other is followed by On-site Visit called as “Interim Examination with visit.” Items to be examined and which procedure to be applied is notified the Applicant Institution by JABEE with the previous accreditation decision.

(3) Comprehensive Examination for renewal of accreditation

Currently accredited programs (with six-year term of validity) can continue to be accredited by

successfully undergoing another examination within the year following the last year of the term of validity. This examination is called as "Comprehensive Examination for renewal of accreditation."

(4) Comprehensive Examination for programs subject to change

In case there is a change in a program to any item relevant to Accreditation Criteria and/or the program's contents during its term of validity of accreditation, JABEE determine whether it is appropriate to provide the program continuous accreditation until the end of term of validity. If any problem is found, in other words, there are possibilities that the program is not substantially equivalent before and after the change, another examination will be carried out to evaluate the program's adequacy for accreditation. Examinations conducted under these circumstances are called as "Comprehensive Examination for programs subject to change."

(5) Re-examination

If a "deficiency" is found in a program at the examination for renewal of accreditation or for programs subject to change, as well as Coordinating Committee of Examination and Accreditation admits the necessity to re-examine the program, "Re-examination" will be carried out a year later.

"Examination by Report"

One of Interim Examination procedures which is conducted only by documentary examination and without On-site Visit.

"Examination Team Dispatching Organizations"

JABEE examines the programs applied by the Applicant Institutions, and accredits the programs that satisfy all of the Accreditation Criteria. For this process, JABEE commissions either single or joint engineering societies that are regular members of JABEE to send out an Examination Team. The main Engineering Societies that send out Examination Teams are called "Examination Team Dispatching Organizations." The Examination Team studies the contents of the Self-Inspection Report submitted by the Applicant Institution, verifies the factual basis of the documents by conducting on-site examination, to determine whether or not the candidate program satisfies all of the Accreditation Criteria.

"Faculty"

"Faculty" means full-time professor, associate professor, assistant professor or research assistant. Part-time faculty may be included depending on the extent of his / her engagement.

"Institution Representatives Liaising with JABEE"

Institution representatives liaising with JABEE, Program Liaison

"Institutions"

It means "institutions of higher education." The programs within the scope of JABEE accreditation are those provided by four-year undergraduate education in the institutions as universities approved by the authorities (Those programs that provide two additional years of specialized training on top of the general polytechnic and junior college education are also within the scope). As far as the contents of the program focuses on basic engineering education, it does not matter which faculty within the university officially provides the program.

"Learning and Educational Objectives"

"Learning and Educational Objectives" are the guidelines that provide evaluation criteria. These refer to specific "learning and educational achievement (including achievement level)" assured by the program concerned. As respects these learning and educational objectives which serve as the prerequisite of accreditation and examination, Criterion 1 requires as follows.

(1) The learning and educational objectives must be appropriately established and disclosed widely on and off campus, and must be known to the faculty members and students involved in the program.

(2) The learning and educational objectives must be established, giving due consideration to the applicant institution's traditions and resources, to the specific fields in which its graduates are particularly active, and to social needs and students' requirements.

"Levels expected by the society"

The "levels expected by the society" are adequately high as levels required for basic education to foster engineers of bachelor's degree. As well as the levels are enough high to enable international mutual recognitions of substantially equivalent of concerned education programs. Such levels vary from field to field, while changing with the passage of time, and thus cannot be clearly described in concrete terms. Therefore, it is desirable that the Applicant Institution and the party responsible for the accreditation and examination should fully exchange opinions to reach agreement on these levels before on-site examination is completed. It is expected that in the process of accreditation and examination, the levels envisaged by the two sides will converge within a narrow range, eventually making it possible to guarantee the quality of education based on the common levels. In case a discrepancy remains unsettled between the two sides, individual circumstance is considered for judgment and coordination, based on the results of the on-site examinations, at each stage of the Discipline-Based Examination Committee in Appointed Societies and the JABEE Coordinating Committee of Examination and Accreditation, and the final decision will be made by the JABEE Accreditation Commission.

"Observer"

There are two categories of observers, namely those attending as trainee to become Team Examiners, and those attending as monitor how the examinations actually operate (such as those related to Washington Accord or some public organizations, etc.) The former should experience similar work as the Team Examiners while the latter is allowed to make requests as long as they do not disturb the examination process, subject to the judgment of the Examination Team Chair (in consultation with the Applicant Institution if required depending on the circumstances).

"Program"

The term "program" refers to the entire educational process and its environment, from admission to graduation, including the evaluation of student performance, not only with respect to the curricula of specific departments, courses, or their subdivisions, but also with respect to completion of the course as a whole. It is a generic term to represent departments and courses concerned. Thus programs here are not confined to those provided solely by a department within a faculty as is typically the case with the majority of the universities and other Applicant Institutions. A program can consist of multiple departments, while a department can provide multiple programs. Also part of a program can be provided by other universities or institutions under a specific cooperative arrangement.

It is desirable that the name of a newly established program appropriately represents the program's specialized field of study, clearly indicating its learning or educational objectives, so that it can be precisely recognized by the public. The name should be different from those of other programs provided by the same institution. In particular, it must be clearly distinguished from other programs that are not accredited by JABEE. When the program to be accredited is the only program provided by a department, the name of the department is directly employed as the name of the program.

"Program Operation Body"

An organization which takes responsibility to operate a program at the institutions of higher education. When the program to be accredited is the only program provided by a department,

the department corresponds to the “program operation body.”

“Recording of the Examination Results”

To which extent the program satisfies the Accreditation Criteria is examined and recorded in accordance with the rating scheme as follows:

- (1) Acceptable “A”: Satisfying the Accreditation Criterion
- (2) Concern “C”: Satisfying the Accreditation Criterion at the moment, this item can benefit from some improvement, hence action of certain kind will be desirable for the program to continue to fully meet the Accreditation Criteria.
- (3) Weaknesses “W”: Although this item almost satisfies the Accreditation Criteria at the moment, the degree of its compliance is so weak that the item necessitates some improvement. Certain kind of action is needed to reinforce the item’s degree of compliance.
- (4) Deficiency “D”: The item fails to satisfy the Accreditation Criteria. Thus the program is not deemed to comply with the Accreditation Criteria.