

# Guide to Preparing Self-Inspection Report

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## Introduction

This "Guide to Preparing Self-Inspection Report" provides guidelines for institutions of higher education applying for accreditation (hereinafter called "the Applicant Institution") to help them prepare Self-Inspection Report. Self-Inspection Report is a reference provided by the engineering education program seeking accreditation (hereinafter called "the program"). Self-Inspection Report is very important document because it helps the Applicant Institution to explain how the program satisfies the Accreditation Criteria with presenting evidential materials, and should therefore be formulated so as to be easily understood by the examiners. Also, Self-Inspection Report can serve as the basis for future improvement of the program, since problems that need to be addressed can be identified in the process of preparing the report. The intent, interpretation and supplementation with regard to the Accreditation Criteria, the points to be examined, and other aspects are discussed in the document entitled, "Procedure and Methods of Accreditation and Examination", which must be referred to at the time Self-Inspection Report is prepared.

Self-Inspection Report is comprised of a main text and a second, separately bound volume that contains quoted reference and evidential material. In principle, the two volumes together should be no thicker than 60mm. The main text volume (hereinafter called "Volume I") must have pages numbered consecutively throughout the volume, and contain a table of contents. The second volume containing quoted reference and evidential material (hereinafter called "Volume II") must also have a table of contents, with pages numbered separately for each chapter (criterion). Immediately following the table of contents, a list of the names of evidential materials that can be inspected at the on-site examination should be attached. When a quoted reference or evidential material is cited in Volume I, the citation must include clear information about where the said material can be found in Volume II. Quoted reference and evidential material other than those attached to the Volume II of Self-Inspection Report, will be subject to investigation at the on-site examination, thus they must be presented to the Examination Team on such occasion. Self-Inspection Report is used solely for the accreditation and examination purpose, and will not be published without the consent of the concerned Applicant Institution.

### **1. Program Information**

The following information must be provided as prerequisite for the accreditation and examination.

**(1) Name of Applicant Institution**

· Enter the name of the Applicant Institution to which the program belongs. When the program is one of several courses within a department, the name of the department must also be entered. When the program is comprised by an entire department or by several departments, enter the name of the immediate superior organizational unit such as faculty.

**(2) Name of the program**

· Enter the name of the program. Newly launched program or a program recently changing its name is advised to choose a name specifically representing its field of specialty, as well as its learning and educational objectives, so that it can readily be identified and recognized by society. Its 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 the Japan Accreditation Board for Engineering Education (hereinafter called "JABEE"). When the program seeking accreditation is the only program provided by a department, the name of the department is directly employed as the name of the program.

**(3) Name of the academic degree to be awarded**

· Enter the name of the bachelor's degree that is awarded to the graduates of the program (the degree cited on the degree certificate and diploma, including any degree description.)

**(4) Contact information**

· Enter the name, affiliation and position, postal code, address, telephone number, fax number and e-mail address of the "representative liaising with JABEE (typically, dean or head of administration for the faculty)" and the "program officer", (responsible for running the program), both of whom are in charge of communicating with the Examination Team Chair.

### **(5) Numeric Data related to the Program**

JABEE will take statistics of these data from every applicant institution and make it public at an appropriate time of every several years. The names of institutions and programs shall be hidden.

## **2. Results of Self-Inspection**

The accreditation decision is made by determining whether or not the program satisfies the Criteria for Accrediting Japanese Engineering Education Programs (hereinafter called "Accreditation Criteria"), by reviewing the contents of the Self-Inspection Report while inspecting the actual circumstances by on-site examination. Specifically the following four points among all Accreditation Criteria are focused in the process of accreditation and examination, which require due attention in the process of preparing the Self-Inspection Report.

[1] Does the program set up appropriate learning and educational objectives, which shows the ensured level of knowledge and abilities of its graduates?

[2] Is the program keeping up with the commitments as described and stated in the Self-Inspection Report, school regulations, syllabi, pamphlets, etc.?

[3] Do the all graduates of the program attain the knowledge and abilities defined by the-learning and educational objectives of the program at a level that meets or exceeds the levels expected by engineering and industrial societies?

[4] Is the built-in system for continuous improvement working within the program?

In preparing the Self-Inspection Report, the Applicant Institution must conduct a self-inspection based on this "Guide to Preparing Self-Inspection Report". Specifically, each item to be inspected (Which is corresponding to Accreditation Criteria, e.g. "Criterion 1 Establishment and Disclosure of Learning and Educational Objectives" and "3.1 Admission and Enrollment" under "Criterion 3 Educational Methods", hereinafter called "inspection item". To be referred to "Guide/Table A Inspection Items and Inspection Criteria" as attached on the last page of this "Guide to Preparing Self-Inspection Report".) must be subjected to self-inspection, on the basis of the

“inspection criteria” marked by a bracketed number (1), (2), (3) etc. within each “inspection item”. Then an evaluation based on the results of such self-inspection should be entered as an evaluated number level (1~5) in “Table 1 Results of Self-Inspection” of the Self-Inspection Report: Volume I, referring to the inspection criteria and level on a five-grade scale (levels 1~5) in Guide/Table A of this Guide.

Explanation regarding each inspection criterion for each inspection item should be designed as self-contained, so that the Examination Team can determine to what extent the criterion is satisfied, without referring to the explanations regarding inspection criteria for other inspection items. However, duplicate quoted reference and evidential material should be avoided, and each explanation should clearly state the page and section where the cited reference can be found.

Incidentally those inspection items and inspection criteria that are believed to have already been fully examined by the third party organization, etc, can be exempted from the examination by JABEE. Relevant reference material must be provided for any case which is believed to come under this principle.

## **2.1. Criterion 1: Establishment and Disclosure of Learning and Educational Objectives**

As regards the establishment and disclosure of the learning and educational objectives, consideration must be given to the intent of sections (1) ~ (3) of Criterion 1.

(1) Given the aim of fostering self-reliant engineers, does the program establish and disclose concrete learning and educational objectives specific to the program, which comprehensively cover the areas of knowledge and abilities described in (a)-(h), section (1) of Criterion 1?

· The learning and educational objectives defined by JABEE are the guidelines that serve as criteria for evaluation, and comprise concrete "learning and educational results" as guaranteed by the program. In other words, the learning and educational objectives are the basis for examining Criteria 3~5, and must have contents concrete enough to be developed into the educational contents and methods for the students to achieve their learning and educational objectives, while concrete enough to present the methods and standards to prove the level of students' achievement against the learning and educational objectives. Especially the level of achievement against the

learning and educational objectives is examined on Criterion 5. Therefore it should be noted that if the learning and educational objectives are not enough concrete, it makes the institution difficult to prove the level of achievement. Therefore, if the learning and educational objectives are given only in general terms, each objective must be broken down into more concrete and measurable form, while method of evaluation (evaluation method) coupled with criterion (evaluation criterion) for each objective must be shown. For these reasons, it should be noted that the application of a program without concrete and clear learning and educational objectives will not be considered for accreditation and examination, as they are the prerequisite to the whole process.

- Items (a)~(h) give the framework as well as scope of categories and items of knowledge and abilities, for which specific contents and levels should be clearly presented within the learning and educational objectives of the program. As clearly explained above, items (a) ~ (h) do not in themselves purport to serve as the learning and educational objectives, which is why items (a) ~ (h) are described in rather general terms, so as not to restrain the diversity of the program.

- Although each program could possibly establish its learning and educational objectives by describing the specific content and levels that correspond with each of (a)-(h), it is not necessarily required to follow the (a)-(h) itemization in establishing the learning and educational objectives that duly reflect the program's own unique characteristics. Rather, it is desirable to have these items arranged in accordance with the general educational aims and principles of each Applicant Institution.

- The knowledge and abilities described in items (a)~(h) can be acquired whether in general education course or in specialized education course.

- Each learning and educational objective can simultaneously include two or more items of (a)~(h).

(i) Itemize the unique and concrete learning and educational objectives [(A), (B), (C), etc.] established in consideration of the above requirements by the program. In case the learning and educational objectives are given in general terms and thus need to be further broken down into a form that can be served for concrete evaluation, the itemization should include subcategories such as (A-1), (A-2), etc. for (A), while (B-1),

(B-2), etc. for (B).

(ii) Demonstrate that the learning and educational objectives cover all areas of knowledge and abilities outlined in items (a) ~ (h), section (1) of Criterion 1, including Program Criteria by Field. Specifically, explain how the Applicant Institution interrelate its learning and educational objectives with the knowledge and abilities outlined in items (a) ~ (h), and prepare a table (Table 2 in Volume II) illustrating the corresponding relationship between the two, to demonstrate that the program ensures the students the knowledge and abilities as outlined in items (a) ~ (h), on the assumption that they attain the learning and educational objectives of the program.

(iii) Indicate, in the form of Table 3 in Volume II, the evaluation methods and criteria for achievement level of each learning and educational objective, to show that the learning and educational objectives are concrete enough to be objectively evaluated. However, the examples shown in Table 3 are merely for illustrative purposes, and the Applicant Institution is urged to formulate and implement its own appropriate evaluative methods and criteria.

(iv) Explain the status of disclosure as regards the learning and educational objectives. Give a list of the Applicant Institution's active publications such as pamphlets, enrollment guide, student handbook, class handbook, syllabi, instructors' record of activities such as guidance and any websites, clearly stating where they are distributed. (It is important for the learning and educational objectives to be disclosed both within and outside the Applicant Institution, since these objectives also serve to ensure the society the level of the knowledge and abilities maintained by the program graduates.) Also, explain the measures taken to ensure that students and faculty associated with the program are well acquainted with the learning and educational objectives.

(v) Whether accreditation is granted or not also depends on how the program's learning and educational objectives have been updated thus far, as well as how and when such updating has been disclosed. Explain the history of updating, specifying the timing of the last one, tracing the changes hitherto in the contents of the objectives, if there really was any such updating and change. Describe when and how disclosure regarding the learning and educational objectives, including any changes, have been planned and implemented towards the enrolled students in each academic year. Suggested examples of quoted reference and evidential material here include,

department pamphlets, websites, syllabi, class handbook, instructors' guidance records. Photocopies of the relevant sections of these materials should be provided as attachment in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(2) Have the learning and educational objectives been established with unique features, in consideration of such factors as tradition, resources of the institution as well as the fields in which its graduates are particularly active, and are they duly disclosed?

(i) Demonstrate concretely that the learning and educational objectives with unique features are established within the framework provided by items (a) ~ (h), or even beyond such framework in some areas, in consideration of the Applicant Institution's tradition, resources and the fields where its graduates are particularly active, by describing in detail such unique features (e.g. tradition, founding philosophy and principles, human resources and facilities; history and specialties). Also, explain the process in which such unique learning and educational objectives were established. Suggested quoted reference and evidential material here can include, list of employers of its graduates (information for the last couple of years is good enough). Photocopy of the relevant part of such list should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(3) Have the learning and educational objectives been established in consideration of the societal requirements and student requests?

(i) Explain the process in which the contents and levels of the learning and educational objectives are determined taking into consideration the needs of the society including the industries in which the program graduates are particularly active, as well as the students' requests, while ensuring the levels as required by the society (refer to Section 3 of "Procedures and Methods of Accreditation and Examination"). Suggested example of the quoted reference and evidential material here may include, organization, members list, record of meetings schedule, and minutes of a board, if any such board is established within the Applicant Institution. Also record of the alumni association activities, results of the questionnaire regarding graduates employment status (obtained from both graduates and employers), and results of external evaluations can serve the purpose here. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the

Self-Inspection Report. The documents such as meeting minutes need not to be wholly copied, but just partial copy is fine as example, if the whole copies can be made available at the on-site examination.

## **2.2. Criterion 2: Quantitative Curriculum Requirements**

(1) Does the program comprise equivalent of four years of undergraduate study/education, and qualify as graduates those students who have achieved bachelor's degree after earning 124 or more credit units?

(i) Specify the Applicant Institution's requirements for graduation and demonstrate, by quoting or referring to related regulations and credit allocation tables, that the students are required to earn at least 124 credit units while receiving an education equivalent to four- year undergraduate program.

Credits earned in the four-year undergraduate programs, and those earned in the upper grades (fourth and fifth grade) and advanced courses at colleges of technology are treated equally. Furthermore credits earned on a course in the third grade of the college of technologies can also be treated likewise, if the program can prove that the level of educational contents of such course are equivalent to those provided in the undergraduate education at universities. In this case, claim for such equal treatment must be supported by showing the material such as syllabi, textbooks, test questions and answers at the on-site examination. Examples of the quoted reference and evidential material here include: the credit earning status of the graduates of the previous-year (2002) or their equals having completed substantially equivalent programs (individual names of the students are not required), school regulations, undergraduate faculty handbook; department course handbook; etc. Copies of the relevant sections of these materials must be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(2) Does the curriculum comprise at least 1,800 contact hours (class hours as well as study hours under instructors' guidance)? Also, does the curriculum include at least 250 hours of study in the humanities and social sciences, etc. (including language studies), at least 250 hours of study in mathematics, natural sciences and information technology, and at least 900 hours of study in the field of specialization?

- It is important that the Applicant Institution should provide a form of education, particularly in an engineering education, in which students are led by faculty instruction and guidance, to study spontaneously and independently, rather than the form of education simply comprising unilateral conveyance of knowledge.

In encouraging students to study on their initiative, it is considered important to provide a bilateral form of education coping with the questions and requests from the students in response to the contents of instruction and guidance. This is why each of the accredited programs tend to provide the combination of various forms of education such as lectures, practice exercise, laboratory works, practice exercises, projects and graduation theses, through instruction and guidance, whereby faculty are engaged not only in delivering knowledge but also leading the students to study independently and spontaneously towards enlightenment.

Thus a responsible basic education program designed to foster self-reliant engineers, should be required to provide at least 1,800 full hours of such instruction and guidance. (Refer to Section 5.2 of "Procedures and Methods of Accreditation and Examination" for the basis of calculation of this contact hours.)

- The headings given to each subdivided category of the aforementioned contact hours, such as "the humanities and social sciences, etc. (including language studies)", "mathematics, natural sciences and information technology" and "study in the field of specialization" do not correspond to classification of course subjects or organizational framework within the Applicant Institution, but just reflect concrete contents of learning. For example, if a subject titled "engineering ethics" is officially established within the category of "study in the field of specialization", it can still be counted in the category of "the humanities and social sciences (including language studies)" here. Furthermore, contact hours can be subdivided even within a subject, according to contents, into a few categories for the purpose of counting. However, double counting of the hours for the same learning contents, in two or more categories is not allowed.

(i) With due considerations to the aforementioned, demonstrate that the program guarantees at least 1,800 contact hours, including at least 250 hours for the humanities and social sciences (including language studies), at least 250 hours for mathematics, natural sciences and information technology, and at least 900 hours for the field of specialization, by quoting and referring to Table 4 in Volume II which

should be prepared based on the relevant regulations, course subjects allocation schedule, etc. Incidentally "Reference" below can be referred to in the preparation of Table 4.

[Reference]

[1] Prepare "Reference Table 1" as Attachment B on the last page of Volume II as a step towards preparing Table 4. (Note that similar table may be provided separately by relevant academic societies regarding program criteria by fields.)

[2] In the matrix of Reference Table 1, titles of all the subjects are laid out vertically, while number of credit, whether compulsory or elective, time schedule of lecturing (specifying grade and term, etc.), forms of education provided such as lectures, practice exercises, laboratory works or graduation theses, number of total hours (hour), contact hours, and the extent of adherence to each of the learning and educational objectives are laid out horizontally.\*<sup>1</sup>

\*1. If the program provides the subjects falling into the categories that are described in Section 5.2 of "Procedures and Methods of Accreditation and Examination", as (P): lectures at other universities, etc.; (Q): internships, etc.; (R) : lectures, etc. provided via videograms, the 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 exercises 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 graduation theses, etc.," by using the symbols "P, Q, R, S, and T" above.

[3] Enter the number of full hours (a full hour comprises 60 minutes) for each subject in the "total hours" column. For the contact hours provided by the categories (P) (Q) (R) (S) and (T) above, specifically describe for each form of education exactly where and how such learning activities take place, and in what way instructors provide instruction and guidance in such activities. Then calculate equivalent full hours, based on the effectiveness of each form of education, etc. Section 5.2 of "Procedures and Methods of Accreditation and Examination" can be referred to in calculation of this number of total hours.

[4] Allocate the number of total hours into those categories, namely “the humanities and social sciences (including language studies)”, “mathematics, natural sciences and information technology”; as well as into the subdivided items (1), (2), (3), etc. particularly in the category of “study in the field of specialization”. Enter the total of the above (1), (2), (3), etc. in the column of "Number of Total Hours" under the category of study in the field of specialization.

[5] Likewise, allocate the total hours into the four forms of education namely, “lecture”, “practice exercise”, “laboratory works”, and “others”. However, this does not apply in cases such the given example of a graduation thesis, when the total number of hours is divided among more than one category of learning contents, thus making it difficult to allocate the hours into the four forms of “lecture”, “practice exercise”, “laboratory works”, and “others”.

[6] Show the extent of adhesion to each of the learning and educational objectives, in the columns marked with (A), (B), (C) , etc. under the extent of adhesion to each of the learning and educational objectives, by marking double circle ( ) to show strong adhesion while a single circle ( ) to show weak adhesion.

(ii) How Table 4 is prepared by using Reference Table 1

[1] Total hours of compulsory and elective subjects

For compulsory subjects required to qualify as graduates of the program, sum up the contact hours in “category of learning contents” of each subject.

For elective subjects, note that only the total contact hours taken to meet minimum requirement for graduation can be counted here, namely contact hours voluntarily taken in excess of such minimum requirement cannot be counted. Thus it is necessary to explain the basis of calculations referring to the rules that restrict the scope of subjects to be elected. The minimum of the contact hours calculated by this method, corresponding to “category of learning contents” must be entered in the “total hours of compulsory or elective subjects” column of Table 4. Total contact hours calculated in this way must meet the following minimums in each category of learning contents: 250 hours or more in humanities and social sciences, etc. (including language studies); 250 hours or more in mathematics, natural sciences, and information technologies; and 900

hours or more in study in the field of specialization. In all, a total of at least 1,800 hours is required. When many elective subjects span more than one “category of learning contents,” there may be some cases in which, depending on the way elective subjects are selected, it is not possible to demonstrate that the required hours have been completed. One example of how to overcome this problem is to draw up a contact hour chart for each student, which explains how the contact hour requirements shown in Table 4 have been met by all students who have completed the program.

[2] Lectures, practice exercises, laboratory works, and others

Enter the number of total contact hours of subjects, for which the total number of hours can be allocated into the four forms of education namely, “lecture”, “practice exercise”, “laboratory works”, and “others” in Reference Table 1 of Volume II.

Though it depends on the field, material such as schedule showing guaranteed contact hours by subject; schedules showing guaranteed contact hours for each student; and records of hours dedicated to graduation thesis for each student, can serve as the quoted reference and evidential material here. Copies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

### **2.3. Criterion 3: Educational Methods**

#### **2.3.1. Admission and Enrollment**

(1) Does the program establish and disclose an admission policy designed to attract students with adequate qualifications and resources to achieve the program’s learning and educational objectives? Furthermore does it establish and disclose specific student selection methods to realize its admission policy? Also in cases where diverse modes of entrance examinations are implemented, does the program provide measures to reinforce students’ inadequate knowledge or abilities (for example by means of supplementary lectures after admission) as arrangement to ensure that they can eventually achieve the program’s learning and educational objectives?

(2) In the case where students are enrolled in the program after completing general

education courses, etc., does the program establish and disclose concrete methods for selecting students for admission to the program, taking into consideration the fact that the students' performance in learning from admission to enrollment also should be examined? Also are students actually selected in accordance with such methods?

(i) Explain when and under what policy admission to the program is implemented, clarifying how it is interrelated with the admission to and graduation from the Applicant Institution, while quoting and referring to the relevant regulations, etc. Suggested examples of the quoted reference and evidential material here include entrance examination guidebook; data on the number of enrollees and applicants in each year (desirably for the last four years). Also in the particular case where students are to enroll in the program after completing general education courses, etc., a copy the relevant parts of the material such as enrollment allocation regulations, students registry (grade 3 and 4), websites, etc. must be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(ii) In the cases where modes of admission and enrollment are diversified, explain the measures to reinforce students' knowledge and abilities that could be short of the required level at the time of enrollment or admission, as arrangement to ensure that they can eventually achieve the program's learning and educational objectives if any such measures are provided.

(iii) List the media employed to publish the admissions methods as cited in the quoted reference and evidential material above and specify where they are distributed.

(3) Does the program establish and disclose a transfer admission policy for transfer students accommodated into the program from other institutions of higher education, etc? Furthermore, does the program establish and disclose and implement concrete admission methods and criteria to practice such policy?

(i) Explain specifically the admission process and criteria for accepting transfer students with adequate resources to fare in the program. Suggested examples of the quoted reference and evidential material here include regulations for accepting transfer students, evidence of disclosure (various kinds of disclosure material on administrative affairs, etc.; photocopies are acceptable), specifying where they are distributed. Attach copies of the relevant parts of the quoted reference and evidential

material as aforementioned above, along with data on the number of the admitted transfer students (for the last two years) in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

### **2.3.2. Educational Methods**

(1) Is the curriculum designed and displayed in such a way to ensure that students can achieve the program's learning and educational objectives? Also are the relationships between each subject and the program's learning and educational objectives clearly presented in the curriculum?

(i) Explain the curriculum design policy to ensure that students can achieve the program's learning and educational objectives.

(ii) Prepare a table (Table 5 in Volume II) that shows the time schedule of the course subjects that must be followed, in order to achieve each of the learning and educational objectives, and explain how relevant subjects are arranged so as to lead to the achievement of those objectives. If students are required to follow a specific sequence in completing the subjects, explain such required sequence in detail. In preparing Table 5, it may be helpful to mark double-circle or single-circle in brackets right after each subject marked likewise in Reference Table 1 of Volume II. As quoted reference and evidential material, attach copies of the relevant sections of the department class handbook, etc., in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(iii) Explain specifically the status of display of the curriculum by quoting and referring to the material used for such display.

(2) Are syllabi prepared based on the curriculum design, while being displayed and carried out as designed? Do syllabi clearly state the position and role of each subject within the curriculum? And are educational contents, methods, objectives to be achieved in each subject as well as its evaluation methods and criteria of students' performance clearly indicated? Are educational contents and evaluation methods and criteria of students' performance established, taking into consideration the societal requirement levels?

(i) Demonstrate that the syllabi are prepared and displayed for each subject based on the curriculum, showing the status of such display by quoting and referring to the material displayed. Demonstrate by presenting the actual syllabi in use, that they at least describe how each subject is positioned within the curriculum, along with the educational contents/ methods, textbooks and reference material used, goals to be achieved, and methods and criteria to evaluate students' performance. As the quoted reference and evidential material, photocopies of the syllabi (if too voluminous, part of the syllabi only for the main subjects relevant to achieving objectives is sufficient), for instance can be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(3) Does the program establish, display and implement a system that enhances students' understanding of class work and other activities, promoting their enthusiasm to learn, while coping with their requests as well?

(i) Give concrete explanation by quoting and referring to relevant material, about the system and education methods that are employed and implemented for the purpose of enhancing students understanding, promoting their enthusiasm to learn, while responding to their requests, and also explain how such system and methods are displayed. How they are communicated to students in particular, should be described concretely. Suggested examples of the quoted reference and evidential material here may include, examples of disclosure of the syllabi on the Web; examples of disclosure of questionnaire results regarding student's assessment of instructors' performance and faculty's response to such results, records of the assignment of teaching assistants (TA) in laboratory-based subjects, records of various activities including guidance, records of faculty working hours. Photocopies of the relevant sections of these materials must be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(4) Are students allowed to regularly assess their own level of achievement against the program's learning and educational objectives, for motivation and orientation in their own study?

(i) Quoting and referring to relevant material, provide a specific explanation concerning what methods are employed and implemented to allow students to assess their own achievement against the program's learning and educational objectives, for

motivation and orientation in their own study? For example, explain when and how students are informed of the results of their performance evaluations for each term or grade. Also, concretely explain any measures that are taken to provide students with guidance in the event they fail in a subject or otherwise perform unsatisfactorily. Suggested examples of quoted reference and evidential material here include: material related to the notification provided to students concerning the evaluation results of their level of achievement compared with the program's learning and educational objectives; the students' learning-related portfolios\*; and the ratio of the returned answer sheets and reports after marking. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

\*(Originally, "portfolio" referred to a hinged paper cover used to hold and store written materials. It is a personal information file containing records of courses taken, examination results, reports, theses, and other learning content, results, and evaluations. There are various ways to keep a portfolio, such as collecting learning outcomes for each learning objective, etc. More information concerning portfolios can be found at <https://reps.rose-hulman.edu/newdemo/obj.cgi> and elsewhere.)

### **2.3.3. Educational Organization**

While headcount of a faculty within national or other public institutions is often dictated by governmental regulations, selection of individual faculty staff is usually left up to each institution. Thus, it is impossible to say that each institution has no control over faculty organization, which is why this issue is included in the examination items. Furthermore it is necessary to enlighten people outside the education circle on the circumstances surrounding the Applicant Institution. Incidentally, accreditation will not be granted, if the program is judged to have failed to meet the Accreditation Criteria even for an item where the program officer and others involved cannot be held responsible.

(1) Does the program provide sufficiently staffed and talented faculty, coupled with an educational support system, to deploy the curriculum designed to achieve the learning and educational objectives of the program, by means of appropriate education methods to attain actual educational results?

(i) Prepare “Personal Data of Faculty Member” (Attachment A of Self-Inspection Report: Volume II) and “List of Faculty Members” (Table 6 in Volume II), and demonstrate on the basis of them, that the faculty is sufficiently staffed and talented to attain educational results.\*<sup>2</sup> Also demonstrate, by quoting and referring to relevant reference material, that the program benefits from an educational support system, providing specific description of its role. Table 6 can be mechanically produced from the Personal Data of Faculty Member.

\*<sup>2</sup> In principle, faculty staff in charge of the subjects listed in Table 5 must be thoroughly covered here.

(ii) To determine whether or not the faculty workload is reasonable, prepare a table (Table 7 in Volume II) that shows the activity status of all faculty members listed in Table 6, while providing an explanation about the actual conditions with comments. Table 7 can be prepared mechanically from Personal Data of Faculty Member. Suggested examples of the quoted reference and evidential material related to the educational support system include, regulations and activity records regarding the support system such as department office or department technical support office. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(2) Does the program provide and display a faculty development plan, designed to improve the quality of faculty, and does the program effectively implement activities relevant to such plan?

(i) Demonstrate by quoting and referring to regulations and relevant reference material displayed, that a faculty development system is established and dedicated to improving the quality of faculty, and explain concretely the activities implemented under the system. Suggested examples of quoted reference and evidential material here include, sample cases of educational improvement (faculty development reports), and activity data and records of the relevant intra-institution committees. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report. If too voluminous, showing typical examples is acceptable.

(3) Does the program establish and display an evaluation method to determine the

educational contribution of each faculty member, and is evaluation carried out accordingly?

(i) Specifically show the evaluation methods that are implemented to assess faculty members' educational contributions, and by quoting and referring to relevant regulations and other material, explain how those methods are displayed and communicated to the faculty members. If such evaluations are reflected in rewarding the faculty staff by promotions, etc., explain to what extent they are reflected. Suggested examples of the quoted reference and evidential material here include, activity data and records of the concerned intra-institution committees. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(4) Does the program provide and display an intra-faculty liaison network system to ensure closer coordination between the subjects within the curriculum, and to enhance and improve the effectiveness of the program, and does the program implement activities based on such system?

(i) Demonstrate by quoting and referring to related regulations and other relevant reference material, that such intra-faculty liaison network system is in operation and that it is duly displayed. Also explain concretely measures devised to make the system work effectively, if there are any.

(ii) Demonstrate the network system's activity status concretely, by quoting and referring to relevant reference material. Also, explain concretely how such system has worked to ensure closer intra-faculty coordination, to the enhancement of educational effectiveness, if any such improvement has actually been observed. Suggested examples of the quoted reference and evidential material here include the activity data and records of the related committees, minutes of class staff meetings, and systematic educational activity plans and reports, etc. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

#### **2.4. Criterion 4: Educational Environment**

Certainly the educational environment cannot easily be changed or improved solely

through the efforts on the side of the program. Nevertheless the implementation of the examination can help the staff engaged in the program, appreciate the actual conditions of the program, while results of the examination can provide them with the data and opportunity to launch negotiations with the senior institution authorities for improvement, which is a significant spin-off from the examination. What matters most is whether an effort for improvement is actually being made. Incidentally, accreditation will not be granted, if the program is judged to have failed to meet the Accreditation Criteria even for an item where the program officer and others involved cannot be held responsible.

#### **2.4.1. Facilities and Equipment**

(1) Does the program provide sufficient classrooms, laboratories, practice rooms, libraries, IT facilities, study rooms, rest areas, cafeterias, and other relevant facilities and equipment as required achieving the program's learning and educational objectives?

(i) Explain concretely the status of the installation and maintenance of the aforementioned facilities and equipment, by quoting and referring to relevant reference material, to demonstrate that they are adequate for achieving the program's learning and educational objectives, with due consideration for the amenity such as floor area per student as well as safety, etc. Suggested examples of the quoted reference and evidential material here include users' guides and pamphlets for various facilities (for distribution to students), premises area schedule by use and by structure (A summary is acceptable; Subject to on-site examination if this information is not available), schedule of listed machinery and equipment (Subject to on-site examination if this information is not available), etc. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

#### **2.4.2. Financial Resources**

(1) Does the program endeavor to secure adequate financial resources to provide, maintain and operate the facilities and equipment as needed to achieve the program's learning and educational objectives?

(i) Quoting and referring to relevant reference material, demonstrate and explain in concrete terms the endeavor to secure financial resources. Suggested examples of the quoted reference and evidential material here include, data on allocations of education and research expenses (Subject to on-site examination if this information is not available). Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

### **2.4.3. Student Support System**

(1) Concerning the educational environment, does the program provide, display, and implement a system that promotes students' enthusiasm to learn while attending to their requests?

(i) Quoting and referring to relevant reference material, demonstrate concretely that the aforementioned system is available, how it is operated and how its arrangement is displayed. Student support system comprises, study books, computer systems, arrangement for electronic access to syllabi if it is computerized, and other facilities and equipment that allow students to study actively, as well as support in terms of tuition and housing. Suggested examples of the quoted reference and evidential material here, include the results of student questionnaire, the disclosure data available on the Web, and course activity records related to tutorial system. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

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

It must be demonstrated that all graduates from the program are achieving all of the learning and educational objectives established by the program. The responsibility for developing the demonstration methods and establishing the levels, as in the case of developing educational methods, rests with the Applicant Institution which must be fulfilled unflinchingly.

(1) Is the objectives achievement level evaluated by subject, in accordance with the evaluation methods and criteria as described in the syllabi?

- A list (Table 8 in Volume II) must be formulated that shows the evaluation methods and criteria (noted on the course syllabi) that apply to the main subjects necessary for achieving the learning and educational objectives, particularly those marked with a double circle in Table 5. And an explanation must be provided to demonstrate that achievement level is evaluated for each subject.

- The Examination Team shall determine whether the objectives achievement level by subject is evaluated, in accordance with the evaluation methods and criteria as described in the syllabi, mainly by reviewing the relevant reference material at the time of on-site examination.

(i) Since the evidence for the above (syllabi, student performance reports, test questions and answer papers, coursework, student production, and graduate theses, etc.), the cases on the borderline between pass and failure in particular, shall be subject to examination, material need to be presented in an organized manner by means of label, etc., to minimize the trouble on the side of the Examination Team. At the very least, answer papers, etc. from all students on the minimum level for passing must be presented when on-site examinations are conducted (copies are acceptable). In evaluations that use "A," "B," and "C" or "Excellent," "Good," and "Fair" to indicate different levels of a passing grade, for example, the term "minimum level for passing" refers to "C" and "Fair." When the decision as to whether or not to pass a student rests on the results of multiple tests or tests of different types, a clear explanation must be given concerning how the test results are considered and evaluated. Typical examples used for such evaluation must, at the very least, be presented with regard to the test results of all students on the minimum level for passing. It is also recommended that information be attached concerning how the borderline of pass / fail is decided. Explain concretely the status of preparation.

(ii) As regards evaluations by each subject, it would help to explain if there is any specific arrangement, such as functional separation of faculty in instruction and evaluation, or as unofficial faculty agreement in terms of evaluation. Suggested examples of the quoted reference and evidential material here include activity records of related intra-departmental committees; examples of cross markings of graduation thesis by plural faculties, syllabi (if these material have already been presented, partial quotation there from is acceptable); and student transcripts and other related material

(students' names are not required.). Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(2) Does the program provide methods of evaluating the credits earned by the program students at other institutions of higher education? Are such credits duly converted according to such methods? Also does the program provide methods of evaluating the credits earned by the transfer students at other institutions, prior to their admission to the program? Are they converted accordingly?

(i) Quoting and referring to regulations and other relevant material, explain what methods and criteria of evaluation and credit conversion are used to handle credits earned by program students at other institutions, as well as credits earned by transfer students prior to their admission to the program. In particular, it needs to be demonstrated that the conversion of credits based on such evaluation methods is consistent with the evaluation of students' level of achievement against the program's learning and educational objectives. Suggested examples of the quoted reference and evidential material here include, documents describing the evaluation methods and sample cases of actual evaluation. Photocopies of the relevant sections of these materials should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(3) Has the program established methods and criteria for comprehensively evaluating level of students' achievement against the learning and educational objective of the program, for example, including the use of weighting of each subjects and the results of external examinations, etc. in addition to the evaluation conducted for each subjects, and is the evaluations carried out properly according to such methods and criteria?

(i) Quoting and referring to Table 3 in Volume II, and other relevant regulations and material, demonstrate that evaluation methods and criteria have been established to comprehensively evaluate the level of students' achievement against each of the learning and educational objectives of the program. Also in the cases where some examinations for determine the level of students' achievement or other evaluation methods are carried out, the same preparation as described above in the section (1) (i) of 2.5 Criterion 5 of this "Guide to Preparing Self-Inspection Report" is required for

those test questions and answer papers.

(ii) An effective manner of presentation and explanation should be devised, so that the Examination Team can appreciate that the use of these evaluation methods and criteria ensures that the level of the knowledge and abilities in (a) ~ (h), section (1) of Criterion 1 acquired by the students meets or exceeds the levels required by society.

(iii) Explain specifically the basis of the judgment, to assume the levels required by society in respect of the learning and educational objectives, as well as the evaluation methods and criteria. Suggested examples of the quoted reference and evidential material here include, examples of the evaluation results, minutes of the evaluation decision meetings, results of the questionnaire regarding graduates employment status (obtained from both graduates and employers); and results of external evaluations. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(4) Is a scheme established to confirm whether all program graduates have achieved all of the program's learning and educational objectives? Is the program-completion judged on the basis of such scheme?

(i) Demonstrate that all of the students, who completed the program, have successfully achieved all of the program's learning and educational objectives, by specifically showing the methods and criteria to qualify the completion. Also, prepare a summary of the completion status of all the graduates in the year immediately preceding the year in which the on-site examination is conducted (or the completion status of all the students assumed to have completed, in case the programs is applying for accreditation for the first time). This summary must include the results of evaluation of the level of students' achievement against all learning and educational objectives. Suggested examples of the quoted reference and evidential material here include, evaluation results for the students who completed the program in the previous year or students assumed to have completed (Student's names are not required.) or minutes of the evaluation decision meetings. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(ii) Illustrate the transition of the numbers of students admitted to and graduated from

the program for the past several years, by preparing a table. This requirement does not apply to the programs applying for accreditation for the first time.

## **2.6. Criterion 6: Educational Improvement**

### **2.6.1. Educational Feedback System**

(1) Does the program provide an educational feedback system that collects and examines the evaluation results, regarding the level of student's achievement against the learning and educational objectives, and that checks the validity of the educational contents, methods and environment? Also does the program disclose how such system work? Furthermore, are the activities related to such system actually being practiced?

(i) Describe the educational feedback system as provided under the program and how it is arranged to work, by presenting for instance, a work flow of the components as boards and committees within the system, whereby explaining the role of each component and functions of the system as a whole. Also by quoting and referring to relevant material, specifically explain how the system is displayed, and how activities related to the system are implemented. Suggested examples of the quoted reference and evidential material here include, rosters of the members of the boards and committees within the system, and the regulations, etc. associated therewith, sample disclosures of faculty-oriented improvement plans for class activities, data and records regarding the activities of the concerned intra-departmental committees; and the systematic educational activities plan and its reports. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(2) Is the educational feedback system designed and actually operated to check, in light of needs of society and students' requests, the adequacy of the learning and educational objectives established, and that of the methods and criteria to evaluate the level of student's achievement against the objectives? And those checking process carried out accordingly?

(i) Quoting and referring to relevant regulations and material, give the profile as well as the role of the members of the boards and committees that comprise the educational

feedback system, to demonstrate specifically that the system is organized in such a manner that it can inspect the adequacy of the learning and educational objectives established, as well as the evaluation methods and criteria of their achievement level, in light of the requirement of society and students' requests. In addition, by quoting and referring to the minutes of the board and committee meetings and other material, demonstrate that such adequacy test is actually carried out. Suggested examples of the quoted reference and evidential material here include, rosters of relevant councils and committees, schedule of council and committee sessions and the minutes thereof; as well as the results of the questionnaire. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

(3) Are the records of the regular activities such as meetings of the councils and committees, etc. within the educational feedback system duly displayed?

(i) Explain by what methods and to what extent the records of such regular activities are displayed. Suggested examples of the quoted reference and evidential material here include, activities data and minutes of the relevant intra-departmental committees; data and minutes of the class staff meetings, and activities data and minutes of the concerned intra-institution committees. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

### **2.6.2. Continuous Improvement**

(1) Is the program practice improving its educational content, methods and environment based on the results of the educational feedback system? Is it capable of revising as needed, the learning and educational objectives, as well as the methods and criteria for evaluating the level of student's achievement against the objectives? Furthermore, is there a system effectively carrying out these improvements on an ongoing basis and actually the system is operating?

(i) If the program is constantly revising its educational contents, methods and environment, as well as the learning and educational objectives and the methods and criteria for evaluating their achievement level, based on the results of the educational feedback activities, explain concretely what have been actually revised based on what

educational feedback activities and how. Also explain the effects resulted from such revisions.

(ii) Explain specifically how the system is arranged so as to carry on improvement activities, and show it is actually working effectively as the built-in continuous improvement system, referring to the profile of the members of the boards or committees comprising the system, and their roles, etc. Suggested examples of the quoted reference and evidential material include, activities data and minutes of the concerned intra-institution committees, schedule of the education staff committee meetings specifying its frequency and their minutes, activities data and minutes of the concerned intra-departmental committees, and systematic educational plans, etc. Copies of the relevant sections of the material should be attached in the pages following each inspection criterion in Volume II of the Self-Inspection Report.

## **2.7. Program Criteria by Field**

(i) It must have been demonstrated somewhere in the sections 2.1 through 2.6 in Volume I of Self-Inspection Report, that the program meets the Accreditation Criteria in each bracketed item in the Program Criteria by Field. It would be necessary to present an explanation, by preparing a list specifically showing where they are demonstrated, so that the Examination Team can promptly identify and understand these points.

