

Faculty of Electrical Engineering and Information Technology

Regulations governing aptitude assessment for the Master programme Nanoelectronic Systems

as per 29.05.2011

Pursuant to § 13 (4) and § 17 (6) of the Law on Higher Education Institutions in the Free State of Saxony (*Sächsisches Hochschulgesetz – SächsHSG*) of 10 December 2008, the Technische Universität Dresden enacts the Regulations governing aptitude assessment as statutes:

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Please note: This is an English translation of the German original. **Only the German version is legally binding.**

§ 1

Scope

These regulations govern the assessment of the particular admission requirements (aptitude assessment) on the basis of the provisions of the applicable Law on Higher Education in the Free State of Saxony for the Master programme Nanoelectronic Systems at Technische Universität Dresden.

§ 2

Admission requirements

(1) Pursuant to § 3 of the Study Regulations for the Master programme Nanoelectronic Systems, applicants are admitted on the basis of the aptitude (qualification) required for the Master programme Nanoelectronic Systems.

(2) Pursuant to § 5, to be qualified and thus eligible for admission as defined in par. 1 candidates shall

- furnish evidence of a first qualifying university degree in the fields electrical engineering, information systems engineering, computer science, physics or an equivalent field,
- 2. demonstrate their proficiency in English at level C1 of the Common European Framework of Reference for Languages, unless English is their native language.
- 3. demonstrate their particular qualification for the studies by proving specialist knowledge in the areas
 - a. higher mathematics (differential and integral calculus with several variables, calculus of probabilities),
 - b. digital and analog circuits,
 - c. electric and magnetic fields,
 - d. systems theory (Fourier, Laplace and z-transform)
 - e. layout and functioning of electronic components
 - f. object-based programming.

according to § 5.

(3) Registration onto the Master programme Nanoelectronic Systems is carried out by the Enrolment Office/International Office of TU Dresden pursuant to the Matriculation Regulations in force whose arrangements remain unaffected by the regulations at hand. The proof of aptitude pursuant to these regulations is a prerequisite for admission to the Master programme Nanoelectronic Systems.

§ 3

Admission board

The dean of the faculty Electrical Engineering and Information Technology appoints an admission board for each application period on the recommendation of the academic committee. As a rule, it consists of two professors of the area of studies. The admission board decides whether the admission requirements pursuant to § 2 are fulfilled, invites applicants to aptitude tests or interviews if necessary and decides on objections lodged against the decisions made within this procedure. Moreover, the admission board is responsible for the development and publication of the application form pursuant to § 4 par. 2 no. 1.

§ 4

Application and deadlines

(1) Applicants who wish to apply for participation in the aptitude assessment procedure shall submit the application form together with the application papers for registration in writing to the following address:

Technische Universität Dresden Fakultät Elektrotechnik und Informationstechnik Master-Studiengang Nanoelectronic Systems D-01062 Dresden Germany

German applicants and foreign applicants holding a German university entrance certificate shall apply not later than 15 July of each year. Applicants from abroad with a foreign university entrance certificate are required to apply not later than 31 May of each year.

(2) The following documents shall be enclosed with the application:

- 1. application form;
- 2. certified copy of the university entrance certificate
- 3. certified copy of the first job-qualifying university degree certificate;
- 4. certified copies of additional certificates and other relevant documents that attest the applicant's particular aptitude pursuant to § 2 par. 2 no. 3;
- 5. curriculum vitae with detailed description of educational background;
- 6. cover letter detailing your motivation for this programme and the university/city;
- certified copy of a certificate that provides evidence of adequate language proficiency pursuant to § 2 par. 2. Evidence shall be provided on the basis of the results obtained in an international test, preferably IELTS: level 6.5 or TOEFL 110 points (internetbased test), respectively.

(3) Applications that are incomplete or have not been made in the prescribed manner or arrive after the closing date are excluded from further processing.

(4) If the applicant is unable to provide evidence of the first job-qualifying university degree at the time of application (degree certificate) pursuant to § 2 par. 1, the applicant will still be admitted to the aptitude assessment procedure pursuant to these regulations if 80 % or more credit points, which are required for a successful graduation, have already been awarded. Therefore, applicants are required to furnish proof of their current state of achievements by producing a most recent transcript of all credits as an original or certified copy. The necessity of providing all other proofs listed in § 2 par. 2 and the application form remain unaffected by this.

§ 5

Proof and assessment of aptitude

(1) Applicants prove their particular aptitude for the Master programme Nanoelectronic Systems pursuant to § 2 par. 2 if they have good knowledge in the fields mentioned in § 2 par. 2 no. 3, which can be proven by academic records of completed modules and projects. Here the concession is made that students do not necessarily have to meet the requirement for

one of the fields. In case applicants are admitted to studies they will have to acquire the lacking knowledge in self-study.

(2) The admission board verifies the applicant's particular aptitude first by screening the attached documents, in particular the documents pursuant to § 4 par. 2 no. 3, however only if the admission requirements are fulfilled pursuant to § 2 par. 2. Unless the particular aptitude is clearly demonstrated through the applicant's documents attached to the application, the admission board may arrange an interview pursuant to § 6.

§ 6

Aptitude interview

(1) The aim of the aptitude interview is to find out if pursuant to § 2 par. 2 no. 3 the applicant has the necessary knowledge, skills or abilities that substantiate the applicant's particular aptitude.

(2) The aptitude interview follows a thematically structured order and should not be longer than 30 minutes.

(3) Pursuant to § 3, the admission board invites applicants to the interview in writing and in good time, however not later than two weeks before the date of the aptitude interview.

(4) Minutes will be taken of the essential contents of the interview, the participants and also its duration.

(5) Should applicants fail to appear on the agreed date for the aptitude interview, they have no claim to an alternative date.

(6) If applicants appear for the aptitude interview but are not able to demonstrate their aptitude pursuant to § 2 par. 2, the applicant may apply for the programme again in the following year or later.

(7) If applicants furnish prima facie evidence that they are unable to take part in the aptitude interview as it is because of prolonged or permanent physical disability and/or due to chronic illness, the admission board permits aptitude assessment to be proven in an alternative form. Students may be asked to produce a medical certificate from a doctor and, if there is reasonable doubt, evidence from a public health officer.

(8) If applicants from abroad are unable to take part in the aptitude interview as it is owing to circumstances beyond their control, the admission board permits aptitude assessment to be proven in an alternative form.

§ 7

Aptitude notice

(1) If applicants have demonstrated their aptitude pursuant to § 2, they will be sent an aptitude notice by the admission board. The aptitude notice is to be submitted to the Enrolment Office/International Office of TU Dresden and serves as proof that the applicant is eligible for admission to the Master programme. It is a prerequisite for the enrolment in the Master programme Nanoelectronic Systems.

(2) Unless applicants can prove their aptitude pursuant to § 2, the admission board will issue a written note about this to the candidate that is accompanied by an information sheet on legal remedies.

(3) If applicants fail to produce a document stating their successful completion of higher education studies pursuant to § 2 par. 1 to the Enrolment Office/International Office before the enrolment deadline, enrolment is made for a limited time only. The duration of the enrolment is decided upon by the Enrolment Office. As a rule, it is one semester.

§ 8

Coming into force and public notice

These regulations governing aptitude assessment come into force one day after having been published in the Official Notices (*Amtliche Bekanntmachungen*) of Technische Universität Dresden.

Issued following the decision by the Faculty Council (*Fakultätsrat*) of the faculty Electrical Engineering and Information Technology at Technische Universität Dresden of 20.04.2011 and the approval of the Rectorial Board (*Rektorat*) of 03.05.2011.

Dresden, 29.05.2011

The Rector

of Technische Universität Dresden

Prof. Hans Müller-Steinhagen