

Opinions on
The M.S. Degree in Electrical Engineering
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Electrical engineering as a professional field requires a certain minimal technical and professional knowledge for its practice. Generally it would probably be agreed that this should encompass about five years of formal university study with continual up - dating. Consequently, the M.S. degree is almost a requirement for capable and recognized practice in the field. In this regard the M.S. degree is rarely looked upon as a consolation for those not obtaining the Ph.D. but as the professional development degree. Thus, normally the M.S. studies in electrical engineering would concentrate upon technical and design aspects of a speciality in the field, for example, electrical biomedical instrumentation, integrated circuit computer - aided design, etc., this as a continuation of studies barely initiated in the B.S. program or found important for job applications.

Usually then the M.S. degree is a necessary one for professional practice and competency. With it the student should be prepared to initiate new designs and take professional charge of design projects in the chosen subfield.

It could be argued that for this necessary purpose the M.S. with thesis might be interpreted as a consolation prize for the Ph.D., but in many American universities, as the University of Maryland, the student has the choice of an M.S. with or without thesis. Perhaps the popularity of the M.S. without thesis reflects this attitude, as well as the real needs of the student within the profession. In any event, certainly it is not time to abolish the M.S. degree in electrical engineering and undoubtedly any such attempt would lead to the introduction of an equivalent replacement. Indeed a number of people seem to feel that another year beyond the M.S. is also important, and for this the initiation of another degree, the Engineer's Degree, is often proposed. Presently it is awarded at some institutions. If any degree in electrical engineering would be looked upon as a consolation prize for those not going on to the Ph.D. it would probably be the Engineer's Degree, where the thesis at times is a shortened Ph.D. one.