

## IRIM RESEARCH EXECUTIVE SUMMARY

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## **Factors that Affect Continuing Graduate Enrollment from EMU Undergraduates**

Research Executive Summary

With the nation's economy getting back on the track since 2009, many universities have seen a decline of graduate enrollments. Matriculating more graduate students has become an important priority for many of us. Eastern Michigan University (EMU) has more than 200 undergraduate majors and 150 graduate programs. It enrolls around 17,000 undergraduate students and 3,300 graduate students each fall. In the past 5 years, EMU's new graduate enrollment dropped around 22.9%, but the percentage of continuing enrollment from EMU's undergraduate into graduate programs stays around 30%.

Figure 1. New graduate students' enrollment trends in fall terms

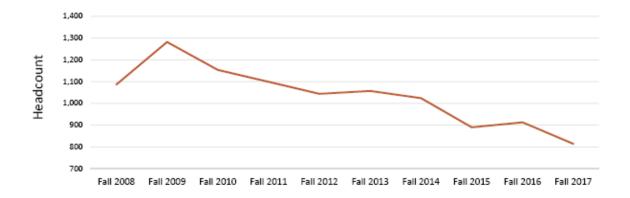


Table 1. Percentage of new graduate students who received an undergraduate degree from EMU

Fall Term	% EMU Graduated
2008	31.49%
2009	32.84%
2010	34.14%
2011	32.03%
2012	33.62%
2013	33.02%
2014	34.47%
2015	33.03%
2016	35.60%
2017	33.66%

## Research Executive Summary (continued)

In this study, we focused on the students who obtained a bachelor's degree during academic years from 2011 to 2016 at EMU, and the variables included age, gender, residency, ethnicity, admission type, years needed to obtain bachelor degree, colleges, departments, majors, honor college indicator and on-campus employment indicator. Adaptive Boosting was selected and used for data analysis. Boosting is a machine-learning ensemble technique that makes maximum use of a classifier by improving its accuracy. The goal of adaptive boosting is to improve the accuracy of a classifier combining single classifiers. Results showed both on-campus employment (76.4) and majors (19.4) have the most relative importance. Employment opportunities can be improved through Graduate Assistant (GA) positions, research funding and internships. Table 2 (next page) has the list of top majors with the highest graduate enrollment for the students who have EMU undergraduate records.

Table 2. Undergrad majors with highest percentages of graduates who continued into a graduate program at FMII

Majors	% EMU Graduated
German Language and Literature	73.91%
Elem Speech/Language Impair	73.53%
Physics – Research	41.67%
Economics – BBA	39.58%
Speech/Lang Imp – Clinical	38.33%
Economics	35.11%
Social Work – Intent	33.73%
Accounting – Intent	33.33%
Dietetics – Intent	31.94%
History – Teaching	29.60%
Paralegal – Intent	29.31%
Computer Information Sys – Intent	29.17%
Mathematics	29.09%
English Linguistics	28.95%
Teacher Prep – Secondary	28.68%