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# Performance Prediction of Concrete Deep Beams Containing Cutouts Internally- Reinforced with Composite Bars

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Department of Civil and Environmental Engineering

PERFORMANCE PREDICTION OF CONCRETE DEEP BEAMS  
CONTAINING CUTOUTS INTERNALLY-REINFORCED WITH  
COMPOSITE BARS

Somoud Jebri Arabasi

This thesis is submitted in partial fulfilment of the requirements for the degree of  
Master of Science in Civil Engineering

Under the Supervision of Dr. Tamer A. El Maaddawy

April 2018

### Declaration of Original Work

I, Somoud Jebril Arabasi, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this thesis entitled "*Performance Prediction of Concrete Deep Beams Containing Cutouts Internally-Reinforced with Composite Bars*", hereby, solemnly declare that this thesis is my own original research work that has been done and prepared by me under the supervision of Dr. Tamer A. El Maaddawy, in the College of Engineering at UAEU. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my thesis have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this thesis.

Student's Signature: \_\_\_\_\_



Date: 22/5/2018

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## Approval of the Master Thesis

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