



**The Hong Kong University of Science and Technology**

**Department of Mathematics**

**MPhil THESIS EXAMINATION**

***Generalized Quadratic Residue Codes of  
Composite Length***

*By*

**Mr. Chi Ho CHAN**

**ABSTRACT**

In this thesis, we successfully generalized the codes of composite length which are reminiscent of QR codes into group algebra code and obtain bound of weight of generalized codes. We also prove the group algebra codes in specific group algebra can be presented by the product of group algebra codes.

<b>Date</b>	<b>: 26 April 2019, Friday</b>
<b>Time</b>	<b>: 3:00 p.m.</b>
<b>Venue</b>	<b>: Room 5562 (near lifts 27-28)</b>
<b>Thesis</b>	<b>Prof. Cunsheng DING (Chairman)</b>
<b>Examination</b>	<b>Prof. Maosheng XIONG (Supervisor)</b>
<b>Committee</b>	<b>: Prof. Beifang CHEN</b>

*(Open to all faculty and students)*

**The student's thesis is now being displayed on the reception counter in the General Administration Office (Room 3461).**