



TANTÁRGYI ADATLAP

Tárgy neve:		Kódja:	
Mikrovezérlők		VEMKFIB255V	
Microcontrollers			
Tárgyfelelős oktató:		Tárgyfelelős tanszék:	
dr. Kántor Zoltán		Fizika	
Elmélet (óra):	Labor (óra):	Kredit:	Számonkérés:
1 (/hét)	4 (/hét)	5	Évközi jegy

A tárgy oktatója:			
név	kurzus típusa	kurzus kódja	nyelv
dr. Kránicz Balázs József	Elmélet	1	magyar
dr. Kránicz Balázs József	Labor	2	magyar

Tantárgy képzési célja:

```
<html>
<head>
<title></title>
<meta http-equiv="Content-Type" content="text/html; charset=windows-1250" />
</head>
<body><span style="font-size: 10pt; font-family: "Times New Roman", "serif"; mso-fareast-font-family: 'Times New Roman'; mso-ansi-language: HU; mso-fareast-language: HU; mso-bidi-language: AR-SA"><font size="3">A mikrovezérlők assembly nyelvű programozásának egyszerűbb hardverorientált feladatok megoldása.</font></span></body>
</html>
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Tantárgy tematikája:

```
<html>
<head>
<title></title>
<meta http-equiv="Content-Type" content="text/html; charset=windows-1250" />
</head>
<body><span style="font-size: 10pt; font-family: "><font size="3"><br />
<table class="MsoNormalTable" style="border-right: medium none; border-top: medium none; margin: auto auto auto 14.4pt; border-left: medium none; border-bottom: medium none; border-collapse: collapse; mso-table-layout-alt: fixed; mso-border-alt: solid windowtext .5pt; mso-yfti-tbllook: 480; mso-padding-alt: 0cm 5.4pt 0cm 5.4pt; mso-border-insideh: .5pt solid windowtext; mso-border-insidev: .5pt solid windowtext" cellspacing="0" cellpadding="0" width="684" border="1">
<tbody>
<tr style="height: 11.5pt; mso-yfti-irow: 0; mso-yfti-firstrow: yes">
<td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: windowtext 1pt solid; padding-left: 5.4pt; padding-bottom: 0cm; border-left: windowtext 1pt solid; width: 23.3pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt" valign="top" width="31">
<p class="MsoNormal" style="margin: 1pt 0cm; text-align: right" align="right"><span style="font-size: 10pt">1.</span></p>
</td>
<td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: windowtext 1pt solid; padding-left: 5.4pt; padding-bottom: 0cm; border-left: #d4d0c8; width: 489.7pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-left-alt: solid windowtext .5pt" valign="top" width="653">
<p class="MsoNormal" style="margin: 1pt 0cm; text-align: justify; mso-pagination: widow-orphan lines-together"><span style="font-size: 10pt">Mikrovezérlők, architektúra, hardvertulajdonságok, program, memóriák.</span></p>
</td>
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<p></tr></p> <p><tr style="height: 11.5pt; mso-yfti-irow: 1"></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: windowtext 1pt solid; width: 23.3pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="31"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: right" align="right">2.</p></p> <p></td></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: #d4d0c8; width: 489.7pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-left-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="653"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: justify; mso-pagination: widow-orphan lines-together">&Ouml;sszehasonl&iacute;t&acute;sok, ciklusszervez&eacute;s (el&ouml; tesztel&ouml;, h&acute;tul tesztel&ouml;, for-next-jelleg&uacute;).</p></p> <p></td></p> <p></tr></p> <p><tr style="height: 11.5pt; mso-yfti-irow: 2"></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: windowtext 1pt solid; width: 23.3pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="31"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: right" align="right">3.</p></p> <p></td></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: #d4d0c8; width: 489.7pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-left-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="653"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: justify; mso-pagination: widow-orphan lines-together">LED-ek villogtat&acute;sa, sz&acute;ml&acute;s, fut&acute;ny, folytonos &acute;tmenettel pulz&acute;l&acute; LED-ek.</p></p> <p></td></p> <p></tr></p> <p><tr style="height: 11.5pt; mso-yfti-irow: 3"></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: windowtext 1pt solid; width: 23.3pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="31"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: right" align="right">4.</p></p> <p></td></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: #d4d0c8; width: 489.7pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-left-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="653"></p> <p><p class="MsoNormal" style="margin: 1pt 0cm; text-align: justify; mso-pagination: widow-orphan lines-together">Nyom&acute;gombok figyel&acute;se poll-oz&acute;ssal, sz&acute;ml&acute;s ind&acute;sa, meg&acute;ll&acute;sa stb., lenyomva tart&acute;si id&ouml; figyel&acute;se.</p></p> <p></td></p> <p></tr></p> <p><tr style="height: 11.5pt; mso-yfti-irow: 4"></p> <p><td style="border-right: windowtext 1pt solid; padding-right: 5.4pt; border-top: #d4d0c8; padding-left: 5.4pt; padding-bottom: 0cm; border-left: windowtext 1pt solid; width: 23.3pt; padding-top: 0cm; border-bottom: windowtext 1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="31"></p>	
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<p>5.</p>	<p>H&eacute;tszegmenses kijelző meghajt&aacute;sa, bitmaszkok haszn&aacute;lata, sz&aacute;ml&aacute;l&aacute;s. A 7447-es IC felhaszn&aacute;l&aacute;sa.</p>
<p>6.</p>	<p>Kombin&aacute;lt feladat a h&eacute;tszegmenses kijelzővel &aacute;s a nyom&oacute;gombokkal.</p>
<p>7.</p>	<p>Megszak&iacute;t&aacute;sok. K&uuml;lső esem&eacute;ny kezel&eacute;se megszak&iacute;t&aacute;ssal.</p>
<p>8.</p>	



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1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt:
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windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="653">
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lines-together"><span style="font-size: 10pt">Soros porti kommunik&acute;ci&acute;. Fogad&acute;s,
k&uuml;d&acute;s, parancs&acute;rtelmez&acute;.</span></p>
    </td>
</tr>
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height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-left-alt: solid
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lines-together"><span style="font-size: 10pt">L&acute;pt&acute;motor vez&acute;rl&acute;se</span></p>
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1pt solid; height: 11.5pt; background-color: transparent; mso-border-alt: solid windowtext .5pt; mso-border-top-alt:
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10pt">14.</span></p>
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windowtext .5pt; mso-border-top-alt: solid windowtext .5pt" valign="top" width="653">
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lines-together"><span style="font-size: 10pt">Z&acute;rhelyi dolgozat.</span></p>
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</table></font></span>
</body>
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```